

Wednesday, May 13, 2020
Time: 6:00 p.m.

"The measure of a country's greatness is its ability to retain compassion in time of crisis." – Thurgood Marshall

A G E N D A

A. OPENING PROCEDURES

ITEM 1

1. Call to Order
2. Electronic Board Meeting Procedures
3. Correspondence
 - S. Higginson, President, BC School Trustees Association
4. Approval of Agenda
5. Invitation for Public Input to matters on the Agenda - *Members of the public can provide input on decision items on the Agenda by emailing board@sd42.ca by no later than 5:30 pm on May 13, 2020. The email subject line should read: INPUT regarding Decision Item. All public input received will be shared with trustees electronically. This agenda item has a time limit of 10 minutes.*

B. APPROVAL OF MINUTES

1. April 29, 2020 ITEM 2

C. PRESENTATIONS - *Individuals and groups invited by the Board to make presentations. Time limits for individual presentations will be established to allow all speakers to present within the time limit for this item. This agenda item has a time limit of 20 minutes including questions; extension is at the discretion of the Board.*

D. DECISION ITEMS

1. Chairperson
 - a) Board of Education Regular Public Board Meetings ITEM 3
2. Superintendent of Schools
3. Secretary Treasurer
4. Board Committees
 - a) Budget
 - b) Finance
 - c) Facilities Planning
 - d) Board Policy Development
 - e) Education
 - f) Aboriginal Education

E. INFORMATION ITEMS

1. Chairperson
2. Superintendent of Schools
 - a) Superintendent's Update ITEM 4
 - b) Carbon Neutral Action Report ITEM 5

3. Secretary Treasurer

a) Energy Management Plan Update

ITEM 6

F. TRUSTEE UPDATES

G. QUESTION PERIOD – *Question period will be restricted to questions only –statements and debate will not be permitted. Questions, with the exception of Trustee questions, will be limited to one question per person. Members of the public can submit questions for the board by emailing them to board@sd42.ca prior to the start of question period. The email subject line should read: QUESTION PERIOD. All questions received before the start of the question period will be answered in the order they are received. This agenda item has a time limit of 10 minutes; extension is at the discretion of the board.*

H. OTHER BUSINESS

1. Public Disclosure of Closed Meeting Business

ITEM 7

I. ADJOURNMENT

To: **Board of Education**

From: Chairperson
Korleen Carreras

Re: **OPENING PROCEDURES**

Date: May 13, 2020
(Public Board Meeting)

Decision

1. *CALL TO ORDER*

We would like to acknowledge that this meeting is taking place on the shared traditional and unceded territories of Katzie First Nation and Kwantlen First Nation. We welcome and recognize all of our First Nations, Métis, and Inuit students and families in our schools and community. We welcome and recognize the many different cultures that are represented in our schools and community.

2. *ELECTRONIC BOARD MEETING PROCEDURES*

For purposes of determining a quorum, at the start of an electronic meeting or during an electronic meeting, the Chairperson shall count as present any trustees who are connected to the meeting by electronic means.

In the absence of pre-circulated material, the Board Chairperson and Officers of the Board as required, shall brief the meeting regarding the matter, or matters before it and shall read the resolution requiring Board consideration and voting.

Voting shall occur by each Trustee identifying him/herself and indicating their vote either for or against the resolution.

3. *CORRESPONDENCE*

- S. Higginson, President, BC School Trustees Association

RECOMMENDATION:

THAT the Board receive the correspondence, for information.

Attachment

4. *APPROVAL OF AGENDA*

RECOMMENDATION:

THAT the Agenda be approved as circulated.

5. *INVITATION FOR PUBLIC INPUT TO MATTERS ON THE AGENDA - Members of the public can provide input on decision items on the Agenda by emailing board@sd42.ca by no later than 5:30 pm on May 13, 2020. The email subject line should read: INPUT regarding Decision Item. All public input received will be shared with trustees electronically. This agenda item has a time limit of 10 minutes.*



British Columbia
School Trustees
Association

April 24, 2020

The Honourable Rob Fleming

Minister of Education

Ministry of Education - Province of British Columbia

PO Box 9045, Stn Prov Govt

Victoria, B.C. V8W 9E2

Dear Minister Fleming,

Subject: Appreciation of Combined COVID-19 Response in Public Education

I write you on behalf of the British Columbia School Trustees Association to share our appreciation for the efforts put forward by the Ministry of Education in response to the COVID-19 pandemic.

Families, and communities as a whole, rely on schools to not only keep their children safe and nurtured, but to provide support for those in the workforce. I wish to thank you for the dedication and hard work you and your team have put forward in working with the Office of the Provincial Health Officer to find the best solutions possible to the seemingly impossible questions we face.

Your efforts in putting the health and safety of students and staff first, all while maintaining a focus on keeping our kids learning, is greatly appreciated by boards of education across B.C. Our association appreciates the high level of collaboration throughout this process and will continue to support the Ministry of Education as we seek solutions to the challenges ahead.

Once again, I wish to highlight our appreciation for what you have done already for B.C. as we continue on this long journey together. Much work remains, and many unknowns exist, but we will be there to help shoulder the load as we continue our work of safely addressing the needs of our students, employees and families.

Sincerely,

Stephanie Higginson

President

British Columbia School Trustees Association

CC:

BCSTA member boards of education
Flavia Coughlan, President, BCASBO
Andrea Sinclair President, BCCPAC
Renzo Del Negro, CEO, BCPSEA
David DeRosa, President, BCPVPA

Chris van der Mark, President, BCSSA
Teri Mooring, President, BCTF
Paul Faoro, President, CUPE BC
Ed Noot, President, FISABC
Tyrone McNeil, President, FNEESC



ITEM 2

To: **Board of Education**

From: Chairperson
Korleen Carreras

Re: **APPROVAL OF MINUTES**

Date: May 13, 2020
(Public Board Meeting)

Decision

RECOMMENDATION:

THAT the Minutes of the April 29, 2020 Public Board Meeting be approved as circulated.

Attachment



**PUBLIC MINUTES OF THE
SPECIAL BOARD OF EDUCATION MEETING
Wednesday, April 29, 2020, (6:00 PM)
VIA VIDEOCONFERENCE**

IN ATTENDANCE:

BOARD MEMBERS:

Chairperson – Korleen Carreras
Vice-Chairperson – Elaine Yamamoto
Trustee – Kim Dumore
Trustee – Mike Murray
Trustee – Pascale Shaw
Trustee – Kathleen Sullivan
Trustee – Colette Trudeau

STAFF:

Superintendent – Sylvia Russell
Secretary Treasurer – Flavia Coughlan
Deputy Superintendent – Harry Dhillon
Executive Coordinator – Karen Yoxall

A. OPENING PROCEDURES

1. Call to Order

The meeting was called to order at 6:00 p.m.

The Chairperson welcomed and thanked everyone for attending. The Chairperson advised that this meeting is being broadcasted live through the SD42 YouTube channel and on the school district website.

The Chairperson acknowledged that this meeting is taking place on the shared traditional and unceded territories of Katzie First Nation and Kwantlen First Nation. The Chairperson welcomed and recognized all of our First Nations, Métis, and Inuit students and families in our schools and community. The Chairperson welcomed and recognized the many different cultures that are represented in our schools and community.

2. Electronic Board Meeting Procedures

3. One minute of silence

The Chairperson recognized April 28, 2020 as the Day of Mourning for those who have lost their lives on the job and asked participants to observe a minute of silence.

4. Correspondence

5. Approval of Agenda

Moved/Seconded

THAT the Agenda be approved as circulated.

CARRIED

6. Invitation for Public Input to matters on the Agenda

The Chairperson advised that members of the public were able to provide input on decision items on the Agenda by emailing board@sd42.ca by no later than 5:30 pm on April 29, 2020. No public input was received.

B. APPROVAL OF MINUTES

Moved/Seconded

THAT the Minutes of the April 15, 2020 Public Board Meeting be approved as circulated.

CARRIED**C. PRESENTATIONS****D. DECISION ITEMS**

1. Chairperson
2. Superintendent of Schools
3. Secretary Treasurer
4. Board Committees

a) Budget

i) Preliminary Budget 2020/21

The Superintendent and the Secretary Treasurer presented the Preliminary Budget 2020/21 and reported that the budget was based upon the Proposed Preliminary Budget 2020/21 and incorporates feedback received at the April 22, 2020 Budget Committee of the Whole meeting, feedback received from partner groups, managers, principals, vice-principals and the board and from an online budget survey.

The Superintendent and the Secretary Treasurer reviewed the feedback received, the changes and clarifications included in the Preliminary Budget 2020/21.

The Secretary Treasurer further reported that the Annual Budget Bylaw for 2020/21 was prepared in accordance with Public Sector Accounting Standards and incorporates the budget balancing proposals as outlined in the Preliminary Budget 2020/21 for the operating, special purpose and capital funds.

Trustee Shaw declared a conflict of interest and did not participate in debate or the vote on Transportation Fees for 2020/21.

Moved/Seconded

1. THAT the Board approve the implementation of the following Transportation Fees for 2020/21

Transportation Fees	
First Child	\$315
Second Child	\$315
Third Child+	\$100

CARRIED**Moved/Seconded**

Trustees provided comments on the 2020/21 Preliminary Budget.

2. THAT the Board approve the transfer of \$2,230,373 from the Contingency Reserve for Local Capital to the Operating fund to assist in funding the 2020/21 operating budget.

AND FURTHER;

THAT the Board approve the appropriation of \$835,000 of 2019/20 operating surplus to assist with funding the 2020/21 operating budget.

AND FURTHER;

THAT the Board approve the transfer of \$32,500 from the operating fund to the Contingency Reserve for Childcare Capital to assist with funding the maintenance and upgrade of the MCFD funded childcare facilities;

AND FURTHER;

THAT the Board approve the appropriation of up to \$200,000 of 2019/20 available operating surplus to top-up the 2020/21 instructional bank.

AND FURTHER;

That the Board approve the preliminary budget changes for 2020/21 as outlined in the Preliminary Budget 2020/21 for implementation.

CARRIED

Moved/Seconded

3. THAT the Annual Budget Bylaw of the Board for the Fiscal year 2020/21 be given three (3) readings at this meeting. (vote must be unanimous)

CARRIED

Moved/Seconded

4. THAT the Board of Education of School District No. 42 (Maple Ridge – Pitt Meadows) 2020/21 Annual Budget Bylaw in the amount of \$186,050,203 be:

Read a first time on the 29th day of April, 2020;

Read a second time on the 29th day of April, 2020;

Read a third time, passed and adopted on the 29th day of April, 2020.

CARRIED

- b) Finance
- c) Facilities Planning
- d) Board Policy Development

- i) Policy Updates

Moved/Seconded

The Secretary Treasurer reported that Policy 5700: Personal Information Protection and Access to Information and associated procedures have been updated to reflect additional advice obtained from legal counsel.

The Secretary Treasurer further reported that under section 77 of the *Freedom of Information and Protection of Privacy Act* a motion was required to reaffirm the Superintendent as the “head” of the School District.

THAT the Board approve the following policies:

- Policy 9415: Inclusive Schools
- Policy 5700: Personal Information Protection and Access to Information

AND FURTHER;

THAT the Board receive for information:

- Procedure: 5700.1: Management of Information and Access Requests
- Procedure 5700.2: Personal Information Requests

AND FURTHER;

THAT the Board hereby resolves to affirm the designation of the Superintendent of Schools as the “head” of the School District under section 77 of the Freedom of Information and Protection of Privacy Act.

CARRIED

- e) Education
- f) Aboriginal Education

E. TRUSTEE UPDATES

Trustees acknowledged the work being done in the school district and the community during the COVID-19 pandemic recognizing the compassion and flexibility of teachers; the hard work and dedication of other school-based staff; the resilience of students; the important efforts of parents; the leadership and hard work of school administrators and senior team and also thanked local and provincial officials for their collaborative approach during the COVID-19 pandemic.

F. QUESTION PERIOD

Questions were posed on the following:

- Staffing in schools
- IT Support Staff presentation

G. OTHER BUSINESS

H. ADJOURNMENT

Moved/Seconded

THAT the Board adjourn the meeting.

CARRIED

The Public Board meeting adjourned at 7:46 p.m.

Korleen Carreras, Chairperson

Flavia Coughlan, Secretary Treasurer

**ITEM 3****To: Board of Education****From:** Chairperson
Korleen Carreras**Re: BOARD OF EDUCATION**
REGULAR PUBLIC BOARD MEETINGS**Date:** May 13, 2020
(Public Board Meeting)

Decision

BACKGROUND/RATIONALE:

In accordance with Policy 2400: School Board Meeting Proceedings, the following schedule is proposed for the 2020/21 and 2021/22 School Board meeting dates:

September 23, 2020	March 10, 2021	September 22, 2021	March 9, 2022
October 21, 2020	April 14, 2021	October 20, 2021	April 13, 2022
November 18, 2020	April 28, 2021	November 17, 2021	April 27, 2022
December 9, 2020	May 19, 2021	December 8, 2021	May 18, 2022
January 27, 2021	June 16, 2021	January 26, 2022	June 15, 2022
February 17, 2021		February 16, 2022	

The proposed schedule of public meetings will allow the Board of Education to complete the Board work outlined in the attached annual Board Work Plan (Attachment A) and to enhance the Board's community outreach through public engagement events on specific topics.

During the year, additional Public Board meetings may be called with 48 hours notice.

RECOMMENDATION:

THAT the Board adopt the following regular Public Board meeting schedule for 2020/21 and 2021/22:

September 23, 2020	March 10, 2021	September 22, 2021	March 9, 2022
October 21, 2020	April 14, 2021	October 20, 2021	April 13, 2022
November 18, 2020	April 28, 2021	November 17, 2021	April 27, 2022
December 9, 2020	May 19, 2021	December 8, 2021	May 18, 2022
January 27, 2021	June 16, 2021	January 26, 2022	June 15, 2022
February 17, 2021		February 16, 2022	

Attachment

ANNUAL BOARD WORK PLAN

SEPTEMBER

- ☑ Review the Audit findings - September 15
- ☑ Approve Audited Financial Statements -September 30
- ☑ Review the Supporting All Learners Annual Report
- ☑ Submit Executive Compensation Disclosure to Public Sector Employers' Council - September 30
- ☑ Review the Board Policy Development Committee Work Plan
- ☑ Consider Motions to BCSTA Provincial Council

OCTOBER

- ☑ Submit Learning Improvement Fund to the BC Ministry of Education
- ☑ Submit Staffing Plan to the BC Ministry of Education
- ☑ Complete Board Self Evaluation
- ☑ Recognize World Teachers' Day
- ☑ Represent Board at BCPSEA Symposium
- ☑ Represent Board at BCSTA Provincial Council Meeting
- ☑ Represent Board at Ministry of Education Annual Liaison Meeting

NOVEMBER

- ☑ Review Class Size
- ☑ Report on School Organizations
- ☑ Receive Enrolment Update Report
- ☑ Review and Approve First Quarter Financial Statements
- ☑ Complete Superintendent Growth Plan Review
- ☑ Election of Board Chairperson and Vice Chairperson
- ☑ Annual Chairperson Report
- ☑ Approve Trustee Appointments to Committees and Community Liaison Groups
- ☑ Attend the BCSTA Trustee Academy

DECEMBER

- ☑ Strategic Plan Review
- ☑ Board and Departmental Operational Plans Review
- ☑ Consider Motions for BCSTA Annual General Meeting and Provincial Council
- ☑ Statement of Financial Information (SOFI) - December 31

JANUARY

- ☑ Receive the Ministry of Education Funding Update
- ☑ Review Terms of Engagement and Appoint or Reappoint Financial Statements Auditor
- ☑ Approve the Budget Process for upcoming year
- ☑ Receive the Budget Implementation Feedback
- ☑ Represent Board at BCPSEA Annual General Meeting

FEBRUARY

- ☑ Adopt the Amended Annual Budget Bylaw - February 28
- ☑ Review and Approve Second Quarter Financial Statements
- ☑ Review and Approve Board/Authority Authorized Courses and Programs of Choice
- ☑ Review Three-Year Enrolment Projection - February 15
- ☑ Receive Enrolment Update Report
- ☑ Represent Board at BCSTA Provincial Council Meeting

MARCH

- ☑ Receive Ministry of Education Estimated Funding for upcoming year
- ☑ Meetings with Partner Groups on Budget
- ☑ Approval of School District Calendar

APRIL

- ☑ Receive Proposed Preliminary Budget
- ☑ Engage in the Budget Consultation Process
- ☑ Adopt the Annual Facilities Grant Bylaw
- ☑ Approve the Preliminary Budget for Implementation
- ☑ Receive Annual Review of Rental Fees
- ☑ Attend the BCSTA Annual General Meeting

MAY

- ☑ Receive and Approve the Third Quarter Financial Statements
- ☑ Adopt the Annual Budget Bylaw - June 30
- ☑ Approve Academies Specialty Fees and School Fees
- ☑ Receive the Carbon Neutral Action Report

JUNE

- ☑ Receive the Aboriginal Education Report
- ☑ Review Operational Plans
- ☑ Adopt the Board Calendar for the Upcoming Year
- ☑ Review Trustees Remuneration
- ☑ Approve Five-Year Capital Plan for Submission to BC Ministry of Education - June 30

OTHER ITEMS SCHEDULED AS NEEDED

Review and Approve Board Policies and Bylaws
 Review and Approve Capital Project Bylaws
 Hear Appeals as needed
 Ratify Principal and Vice-Principal Appointments
 Ratify Collective Agreements
 Approve Exempt Compensation
 Approve Disposition of Real Property (land and buildings)
 Declare Facilities Surplus for General School Needs
 Recognize School and Community Highlights
 Receive IT Plan Updates
 Receive Energy Management Plan Updates
 Represent Board at BCSTA Branch Meetings
 Attend School Functions
 Attend Employee Recognition Events



ITEM 4

To: **Board of Education**

From: Superintendent
Sylvia Russell

Re: **SUPERINTENDENT'S UPDATE**

Date: May 13, 2020
(Public Board Meeting)

Information

RECOMMENDATION:

THAT the Board receive the Superintendent's Verbal Update, for information.



ITEM 5

To: **Board of Education**

From: Superintendent
Sylvia Russell
Secretary Treasurer
Flavia Coughlan

Re: **CARBON NEUTRAL ACTION REPORT 2019**

Date: May 13, 2020
(Public Board Meeting)

Information

BACKGROUND/RATIONALE:

The Carbon Neutral Action Report for 2019 will be submitted to the Climate Action Secretariat.

RECOMMENDATION:

THAT the Board receive the Superintendent and Secretary Treasurer's 2019 Carbon Neutral Action Report, for information.

Attachment



2019 CARBON NEUTRAL ACTION REPORT

MAPLE RIDGE - PITT MEADOWS SCHOOL DISTRICT NO.42

EXECUTIVE SUMMARY



This Carbon Neutral Action Report for the period January 1, 2019 to December 31, 2019 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2019 to reduce our greenhouse gas emissions, and our plans to continue reducing emissions in 2020 and beyond. By June 30, 2020, the final Carbon Neutral Action Report for Maple Ridge - Pitt Meadows School District No. 42 will be posted to the district website at www.sd42.ca/sustainability.

On March 25, 2015, the Maple Ridge - Pitt Meadows Board of Education approved the *Energy Management Plan*. This plan includes the implementation of lighting as well as heating, ventilation and air-conditioning (HVAC) upgrade opportunities in all 34 school district facilities. The associated greenhouse gas emission reduction resulting from this plan are 758 tonnes of CO₂ emissions.

Through implementing these projects, establishing supporting administrative regulations and creating behaviour change initiatives through outreach and education, this plan will continue to serve as a framework for achieving ongoing improvement of energy performance in support of long-term energy and cost reduction goals.

Sylvia Russell, Superintendent of Schools
May 13, 2020



2019 GREENHOUSE GAS EMISSIONS

In an effort to support organizations through the COVID-19 pandemic, the Ministry of Environment issued a Directive on March 31, 2020, that enabled each public sector organization (PSO) to use their 2018 GHG Emissions as a placeholder for the purposes of their 2019 Carbon Neutral Report.

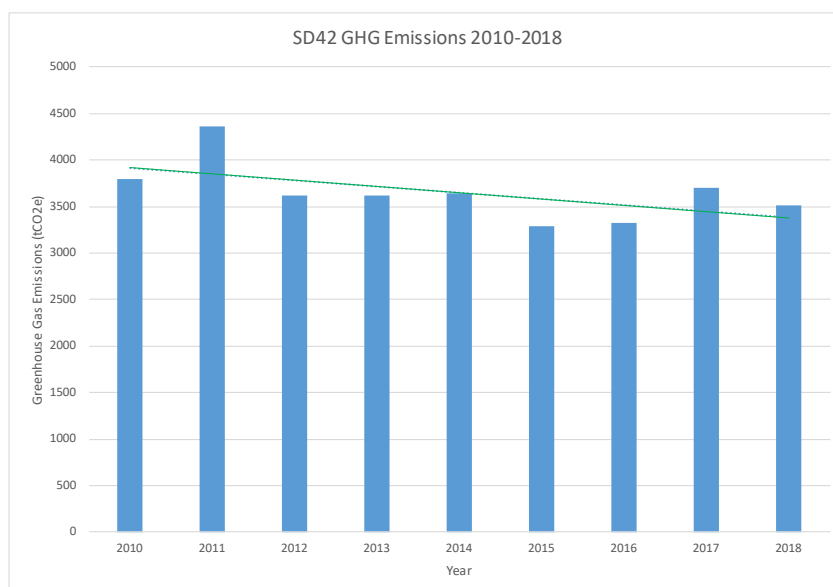
SCHOOL DISTRICT NO. 42 GHG EMISSIONS AND OFFSETS FOR 2018 (TCO2E) GHG Emissions Created in Calendar Year 2018	
TOTAL EMISSIONS	3,374.2
TOTAL BIOCO ₂	5.57
TOTAL OFFSETS	3,379.77
Offset Investment (\$25 per tCO ₂ e)	
TOTAL	\$84,494.25

RETIREMENT OF OFFSETS:

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, Maple Ridge - Pitt Meadows School District (SD42) (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2019 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

EMISSIONS TRENDS

Since 2010, the Maple Ridge - Pitt Meadows School District has seen a 8% reduction in emissions. 2019 actual emissions will be released in September 2020.





ENERGY CHALLENGE: ACTION ON SUSTAINABILITY

SD42's fourth annual Energy Challenge inspired and empowered teachers and students to think about sustainability and energy savings in their schools. In 2019, 15 schools signed up for the challenge and 10 schools participated by completing over 424 energy-saving activities in the month of February. Schools shared their activities via social media with over 82 posts. SD42 saved 43,624 kWh of electricity & 169 GJ of natural gas in the month of February.

The winner of the 2019 Energy Challenge is Alexander Robinson Elementary. Energy Challenge 2019 highlights include: beautiful sustainability pledge trees, art projects using upcycled materials, Glove Your Neighbourhood recycle clothing drive, Instagram photo contests, Energy Tip video series featuring Imperial Galactic Stormtrooper called TC-1588, garden reclamation projects, lights out lunches, building a piezoelectric floor and even a dramatic re-enactment of the Exxon Valdez spill.

Adam Stanley, Principal, Alexander Robinson Elementary said about the 2019 Challenge: "We want the Energy Challenge to exist not as an event in February, but rather as a catalyst for a discussion and mindset that will last all year."



IN THE NEWS

MAY 7, 2019

ENERGY CHALLENGE EDUCATES AND EMPOWERS STUDENTS

Maple Ridge – Pitt Meadows School District No. 42 students and staff were up to the challenge. During the month of February, 10 schools participated in the fourth annual SD42 Energy Challenge and completed over 424 energy-saving activities. This year's highlights included sustainability pledge trees, art projects using upcycled materials, recycled clothing drives, social media contests, energy tip videos, garden reclamation projects, lights out lunches, and much more.



APRIL 25, 2019

GSS CELEBRATES EARTH DAY

Garibaldi secondary students participated in fun, environmentally focused activities last week to celebrate Earth Day. The Garibaldi Green Group organized the April 16 event, which included rock painting, planting seeds, a plant sale, face-painting and temporary tattoos, snacks, board games and screening of the enviro-themed movie *Over the Hedge*. "It was a successful event," said teacher Moein Ferdosian, who sponsors the Green Group along with teacher Helen Carelse. "The Green Team organizes activities to educate and encourage staff and students to make greener choices."



FEBRUARY 7, 2019

GLENWOOD ELEMENTARY WINS SD42 HOLIDAY SHUTDOWN

Before staff at Glenwood Elementary left for winter break, they made sure to switch off lights, unplug appliances and turn down the heat. In total, they turned off or shut down 285 items, which earned the school energy cost savings over the holidays.



JANUARY 31, 2019

STUDENT LEADERS READY TO TAKE ACTION ON SUSTAINABILITY

Elementary and secondary Student Voice leaders from across the Maple Ridge – Pitt Meadows School District are ready to be the change. Last week the students attended an event hosted at Westview Secondary that included a keynote presentation by Maureen Jack-LaCroix of Be the Change Earth Alliance.





Pictured above from left to right: Tammy Lumbis, Jennifer Fitzpatrick and Jennifer Beveridge.

HOLIDAY SHUTDOWN: TEACHERS AND STUDENTS SAVE ENERGY OVER WINTER BREAK

With the valuable support of the Environmental Sustainability Committee, the second annual holiday shutdown campaign at SD42 was a success. Staff at eight schools, including over 4,000 students, staff and environmental champions participated. Through consulting with teachers and principals it was established that the key elements to ensuring high participation in this campaign were: ease of use, short time commitment and flexibility for reporting results.

“Glenwood staff were excited to work together to minimize our ecological footprint over the holidays,” said vice-principal Jennifer Beveridge. “End of day before the Christmas break we were all eagerly unplugging.”

Eight schools participated in the holiday shutdown and together, Maple Ridge – Pitt Meadows School District unplugged over 500 appliances.



PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS IN 2020

- Continuously improve and review our operational policies in an effort to reduce utility consumption.
- Boiler upgrades aimed at replacing end of life equipment and increasing energy efficiency.
- Heating, ventilation and air-conditioning (HVAC) upgrade opportunities in school district facilities: direct digital control (DDC) upgrades, scheduling and security integration, occupancy sensor controls, heating plant optimization and supply air pressure (SAP) reset.
- Proactively deliver regular energy intensity reports to departmental personnel for use in raising general awareness and examining variances from established targets. Prepare energy conservation initiatives to ensure students and staff have an active role in reducing our energy consumption.
- Improve communication of the energy conservation initiative to the broader organization to raise energy awareness.
- Continue meeting with and expanding the staff Environmental Sustainability Committee.



2019 CARBON NEUTRAL ACTION REPORT

22225 BROWN AVENUE
MAPLE RIDGE, BC
V2X 8N6

To: **Board of Education**

From: Secretary Treasurer
Flavia Coughlan
Manager, Energy and
Environmental Sustainability
Alexandra Tudose

Re: **ENERGY MANAGEMENT PLAN
UPDATE**

Date: May 13, 2020
(Public Board Meeting)

Information

BACKGROUND:

At the March 25, 2015 Public Board Meeting, the Board approved the Energy Management Plan. The Plan was created based on the high-level energy assessments for all 34 school district facilities produced by Quantum Lighting Inc. and SES Consulting. The implementation of all lighting and heating, ventilation and air-conditioning (HVAC) upgrade opportunities identified in the plan was estimated to result in energy savings of 4.44 million kWh and 12,800 GJ and annual electricity cost savings of \$0.50 million. In addition to these capital projects, the Energy Management Plan also outlines behavior change projects that will help the school district achieve further energy savings and create a culture of environmental sustainability.

As we come to the end of the five-year Energy Management Plan, the school district has completed 46 lighting and HVAC optimization upgrades at various locations that translate into *estimated* ongoing electrical savings valued at \$0.50 million. Since the Energy Management Plan has been approved in 2015, we have also completed several mechanical upgrades under the School Enhancement Program, former Minor Capital, that are not covered under the Plan which are resulting in additional cost savings for the school district.

PROJECT OVERVIEW:

2014/15 Projects

2014/15 projects included Thomas Haney lighting, heating, ventilation and cooling and Webster's Corner Elementary lighting upgrades. The total actual implementation cost for these projects was **\$0.70 million** and actual ongoing utilities savings are **\$0.12 million**. Additional benefits include improved lighting levels and more consistent lighting. To support these projects, the school district has received **\$0.16 million** from BC Hydro in incentive funding to recognize the energy savings achieved.

In March 2015, the school district, in partnership with BC Hydro Schools Program hosted an Energy Ambassadors workshop for Thomas Haney teachers and students. Students who participated in the workshop prepared and presented recommendations for energy conservation to the Board of Education on May 13, 2015. These recommendations have been implemented in the school district.

2015/16 Projects

Several behavior change projects were undertaken in 2015/16. On September 22, 2015 all school district custodial staff attended one of two training workshops on the newly approved four-year Energy Management Plan. In October 2015, the school district organized the first annual month-long Energy Challenge, initiative aimed at raising awareness about energy conservation in schools by decreasing electricity and natural gas consumption. The winning school was Harry Hooge Elementary. In the fall of 2015, Senior Team approved the creation of the Environmental Sustainability Committee that will investigate, promote, advise, recommend and assist in the implementation of measures that will improve the learning environment of students and working environment of staff through the integration of the principles of environmental sustainability into all school district functions and operations. Lastly, in January 2016, the school district, in partnership with BC Hydro Schools Program hosted a second Energy Ambassadors workshop for Samuel Robertson Technical, Maple Ridge Secondary and Thomas Haney teachers and students.

In 2015/16 lighting upgrades have been completed at Samuel Robertson Technical, Harry Hooge Elementary, Yennadon Elementary, Glenwood Elementary, District Education Office and Maple Ridge Annex. One HVAC upgrade at Samuel Robertson Technical was also completed. The total actual implementation cost for these projects was **\$1.00 million** and actual ongoing utilities savings are **\$0.08 million**. To support these projects, BC Hydro has issued an incentive agreement in the amount of **\$0.16 million** to recognize the energy savings achieved.

2016/17 Projects

In 2016/17 HVAC upgrades have been completed at Highland Park Elementary, Garibaldi Secondary, Westview Secondary, Yennadon Elementary, Glenwood Elementary, Maple Ridge Secondary, District Education Office, Pitt Meadows Secondary and Eric Langton Elementary. In addition to HVAC upgrades, the school district has completed lighting upgrades at Pitt Meadows Secondary and Maple Ridge Secondary, as well as two small lighting upgrades in the gyms of Albion Elementary and Alexander Robinson Elementary due to end of life of the fixtures. The total actual implementation cost for these projects was **\$1.55 million** and the actual ongoing utilities savings are **\$0.09 million**. To support these projects, BC Hydro has issued incentive agreements in the amount of **\$0.1 million** to recognize the energy savings achieved.

Several Science teachers at Garibaldi Secondary and the district Librarian, alongside the energy manager created a pilot Sustainability Unit plan for Science 9 students. The unit plan aligns with the new curriculum core competencies and big ideas. The unit plan content explores the sustainability of systems and First Peoples' knowledge of interconnectedness and sustainability by providing students and teachers with online and paper resources on this topic as well as an in-person presentation by the energy manager.

The second annual Energy Challenge was held in February and the winning school, Alexander Robinson Elementary, designed and implemented activities to reduce electricity consumption for the entire month and explored a broader narrative of how this challenge can be integrated into the school culture and community. There were 11 participating schools. To kick off the challenge, Alexander Robinson Elementary students watched a live "pedal power" demo featuring a Pedal-A-Watt bicycle built by Connex students. The students got a chance to hop on the bike and start pedaling, which created enough electricity to illuminate a light bulb.

Lastly, to foster industry school partnerships, our consultants, Quantum Lighting made a presentation to the Electrician Level I Apprenticeship students on the newest LED lighting technology and demonstrated this technology.

2017/18 Projects

In 2017/18 heating, ventilation and cooling (HVAC) upgrades and lighting upgrades were completed at Edith McDermott Elementary, Laity View Elementary and Pitt Meadows Elementary. Additionally, lighting upgrades were completed at Albion Elementary, Alouette Elementary, Davie Jones Elementary, Eric Langton Elementary and Maple Ridge Elementary. The total actual implementation cost for these projects was **\$1.22 million** and the ongoing utilities savings are **\$0.08 million**. To support these projects and to recognize the energy savings achieved, BC Hydro has issued incentive agreements in the amount of **\$0.12 million**.

The first annual Holiday Unplug campaign was held district-wide before winter break. Over 100 teachers, students and staff participated; and approximately 600 appliances and electronics were unplugged over the two weeks that schools were closed. This campaign was built specifically to target an increasing plug load at the district's schools. Plug load is added energy consumption due to items remaining plugged in to outlets, even when not in use.

The third annual Energy Challenge yielded energy savings of 11,100 kWh of electricity and 117 GJ of natural gas, enough to power 3.5 homes for one year. This February, 7 schools participated with the goal to complete the most energy-saving activities and raise awareness through social media and student outreach. In all, 117 energy activities were carried out district-wide, with creative examples such as Tupperware Tuesday, Free the Plug Friday and Waste Stream Audits. Kanaka Creek Elementary won the competition this year, with a Green Team of over 20 participants.

The Environmental Sustainability Committee (ESC) met for the first time in October of 2017. The ESC meets monthly and has set a work plan to connect environmental initiatives across the district. This year, the Committee aided in the marketing of the Holiday Unplug campaign and Energy Challenge, as well as provided valuable feedback and guidance on the new Waste Collection Program.

2018/19 Projects

2018/19 projects included lighting upgrades at the following schools: Garibaldi Secondary, Blue Mountain Elementary, Whonnock Elementary and Fairview Elementary. The total actual implementation cost for these projects was **\$0.8 million** and the *estimated* ongoing utilities savings are **\$0.05 million**. Additional benefits include improved lighting levels and more consistent lighting. To support these projects and to recognize the energy savings achieved, BC Hydro has issued incentive agreements in the amount of **\$0.06 million**.

Working with BC Hydro and energy modeling consultants, we have applied for the BC Hydro New Construction Incentive Program for Caspenele Elementary. Energy efficient features for the new school include: increased roof and wall insulation, high performance windows, reduced lighting power density, lighting controls, demand controlled ventilation in the gym, condensing boilers, variable speed pump and reduced domestic hot water energy.

The second annual Holiday Shutdown campaign was held district-wide before winter break. Before staff at Glenwood Elementary left for winter break, they made sure to switch off lights, unplug appliances and turn down the heat. In total, they turned off or shut down 285 items, which earned the school energy savings over the holidays and it also made the school the winner of the Holiday Shutdown.

Elementary and secondary Student Voice leaders from across the Maple Ridge – Pitt Meadows School District attended an event hosted at Westview Secondary that included a keynote presentation by Maureen Jack-LaCroix of Be the Change Earth Alliance. Be the Change supports global sustainability through education that empowers behaviour change. Afterward, a trio of leadership students from the Delta School District shared an inspiring presentation on some of the sustainability initiatives at their district. Students were encouraged to take action at school and at home by taking a 'green' pledge, signing their school up for the Energy Challenge or starting a Green Team at their school.

During the month of February, students and staff participated in the fourth annual Energy Challenge. 10 schools participated in the challenge and completed over 424 energy-saving activities. This year's highlights included sustainability pledge trees, art projects using upcycled materials, recycled clothing drives, social media contests, energy tip videos, garden reclamation projects, lights out lunches, and much more. The student-led initiatives resulted in energy savings of 43,624 kWh of electricity and 169 GJ of natural gas – enough to power five residential homes for an entire year. This year's Energy Champion is Alexander Robinson Elementary.

2019/20 Projects

2019/20 projects included lighting upgrades at the following schools: Westview Secondary, Kanaka Creek Elementary, Arthur Peake Centre, Highland Park Elementary, Golden Ears Elementary and three projects are underway at Hammond Elementary, Alexander Robinson Elementary and Maintenance Office. The total actual implementation cost for these projects is **\$1.0 million** and the *estimated* ongoing utilities savings are **\$0.08 million**. Additional benefits include the ability for teaching staff to dim their classroom lights, overall improved lighting levels and more consistent lighting. To support these projects and to recognize the energy savings achieved, BC Hydro has issued incentive agreements in the amount of **\$0.09 million**. BC Hydro has also issued an incentive agreement in the amount of **\$0.06 million** under the BC Hydro New Construction Incentive Program for Cēsqenelē Elementary.

During the month of February, we have organized two parallel behavior change initiatives aimed at reducing the school district's carbon footprint. The first ever Lights Out Challenge in the District Education Office, as well as the fifth annual Energy Challenge. To support the work of the students as they partake in the Energy Challenge, we invited DEO staff to turn off their office lights when and if it made sense. This campaign resulted in a 2% electricity reduction during the month of February 2020, when compared to February 2019.

10 schools participated in the fifth annual Energy Challenge. This year's highlights included sustainability daily tips, food waste robotic dispensers, lights out lunches, hats and scarfs drive (connecting kindness initiatives with environmental initiatives), garbage pick-ups, recycled materials art and much more. This year's Energy Challenge winner was Hammond Elementary.

The first ever Secondary Students Green Team meetup was in March. With the guidance of the Environmental Sustainability Committee, we organized a one-hour event where SD42 secondary school green team members connected by sharing their initiatives and hearing from sustainability leaders in the school community and the Maple Ridge – Pitt Meadows community about upcoming events where students can volunteer.

Energy Management Plan Update

By the end of year five of the Energy Management Plan, the school district completed 46 energy upgrades at various locations that translate into *estimated* ongoing electrical savings valued at \$0.50 million. Updated energy studies are showing that, once the full program is implemented, the district will meet the Energy Management Plan annual electricity savings target of \$0.50 million.

Since 2014, when the school district engaged consultants to produce high level energy assessments for all 34 school district facilities, we have learned the following:

- When compared to the 2015 project estimates provided by our consultants in the high-level energy assessments, we have seen an increase in the capital costs of approximately 40%. This is in part due to the deterioration in the value of the Canadian dollar, the shortage of qualified contractors, and the timelines established by BC Hydro for incentive funding. This has also caused us to add an additional year to the Energy Management Plan.

- Using Prism Engineering's energy management tool called PUMA, we have been able to track the actual energy savings associated with the energy management upgrades. When compared to the energy saving estimates provided by our consultants, we have seen that some projects have shown lower energy savings. Several variables impact the target energy savings including: operational changes such as an increase in the number of students, increase in the number of community rentals and addition of portables; as well as plug load, occupant behavior and weather.
- There are additional maintenance savings associated with the energy management projects including custodians not having to replace any failing lights and the school district not having to purchase product when lights are failing.
- There are also significant qualitative benefits associated with the energy management projects like the introduction of dimmers into the classrooms, allowing teachers to customize their lighting needs based on their tasks.
- In December 2015, BC Hydro has informed us of a few Energy Manager Program changes, including discontinuing their incentives for mechanical and HVAC, refrigeration and commercial kitchen projects starting March 1, 2016. Additional changes that impacted the school district include: discontinuing the energy manager program bonus funding and adding incentive funding caps for energy studies.
- In April 2016, BC Hydro has informed us of several additional Energy Manager Program changes, including incentive programs being fully subscribed (such as their New Construction Incentive Programs), cap of \$300,000 per school district per year for any future incentives, less rigorous sector targets and a change in focus towards demand response and low carbon electrification.
- In May 2016, BC Hydro created the Energy Wise Network program that helps organizations advance employee engagement on conservation by providing them with coaching hours by an employee engagement expert and incentive funding to implement the campaigns. School District 42 has participated in the program since 2016.
- In December of 2017, BC Hydro has announced that lighting upgrades will be required to be more efficient to be eligible for incentive funding. This translates into increased project costs to purchase newer technology, and potential for decrease in incentive funding in 2018 and beyond.
- In March of 2018, BC Hydro has re-introduced their offering of incentives for mechanical and HVAC projects.

For 2020/21 there will be approximately **\$0.66 million** remaining in the energy management plan budget. These funds will be allocated to HVAC and boiler upgrades that will reduce our carbon footprint and result in further ongoing utilities savings.

As the Energy Management Plan is almost complete, we began work on creating a multi-year Sustainability Plan for the school district aligned with the CleanBC Act.

Energy Management Plan Budget Update:

Energy Management Plan Financial Summary	
Revised Energy Management Plan Projects Cost	
2014/15 Projects	0.70 M
2015/16 Projects	1.00 M
2016/17 Projects	1.55 M
2017/18 Projects	1.22 M
2018/19 Projects	0.80 M
2019/20 Projects	1.07 M
2020/21 Projects	0.66 M
Revised Estimated Total Cost	\$ 7.00 M
Energy Management Funding	
Annual Facilities Grant	2.28 M
Carbon Neutral Capital Program (Ministry of Education)	0.46 M
Bylaw Capital (Ministry of Education)	1.40 M
School Enhancement Program (Ministry of Education)	0.30 M
Local Capital Reserve	1.60 M
BC Hydro Incentives (Received)	0.76 M
BC Hydro Incentives (To be received)	0.11 M
Fortis Incentives	0.09 M
Total Funding to Date	\$ 7.00 M

RECOMMENDATION:

THAT the Board receive the Energy Management Plan update, for information.



ITEM 7

RECORD

Pursuant to provisions of 72 (1) of the *School Act*, the following report is a general statement of: (a) matters discussed; and (b) the general nature of decisions resolved at the following meetings from which persons other than Trustees or officers of the Board, or both were excluded:

April 15, 2020 Closed

Call to Order
Motion of Exclusion
Approval of Agenda
Approval of Minutes
Secretary Treasurer Decision Item
Superintendent Information Item
Board Committees
Trustee Reports
Adjournment

Meeting called to order at 2:05 p.m.
Approved
Approved as amended
Approved as circulated
Approved
Received
Received
Received
Meeting adjourned at 3:35 p.m.