

October 28, 2020

Honourable Prasad Panda,
Minister of Infrastructure
Office of the Minister
Infrastructure
127 Legislature Building
10800 - 97 Avenue
Edmonton, AB
T5K 2B6

Honourable Doug Schweitzer,
Minister of Jobs, Economy and
Innovation
Office of the Minister Jobs,
Economy and Innovation
425 Legislature Building
10800 - 97 Avenue
Edmonton, AB T5K 2B6

Honourable Adriana LaGrange,
Minister of Education
Office of the Minister Education
228 Legislature Building
10800 - 97 Avenue
Edmonton, AB T5K 2B6

Dear Honourable Ministers:

RE: Request for Increased Gymnasium Roof Structural Integrity in P3SB2 Plans

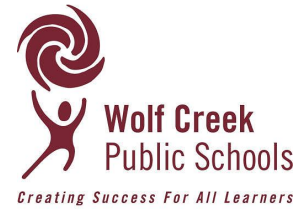
This letter is to advocate for the inclusion of increased structural integrity in the plans for the gymnasium roofs of the new schools being built as part of the P3SB2 bundle, in order to support the possible future installation of solar panels.

We respectfully request that the design for the buildings include enough structural integrity and associated conduits to support solar panels should the respective school boards choose to install them at a later date. The costs to include this addition at the time of the build are minimal, as compared to reinforcing the roofs during a retrofit.

We believe that this addition to the project plan fits well with the current government's focus on innovation highlighted in the two public announcements last month: "Agriculture supports economic innovation and jobs" dated September 29, 2020, and "Jobs for Alberta, innovative tech for the world" on September 22, 2020.

The benefits to having solar panels included in school buildings are manifold. First, there are the long-term cost savings. For example, a 2017 feasibility study commissioned by Edmonton Public Schools suggested that installing roof-top arrays on approximately 25 per cent of EPSB schools would generate in excess of 40 per cent of the Division's electricity needs. Given that the Division's annual electrical utility costs are approximately \$8 million, that equates to substantial savings.

The International Energy Agency's October 2020 [World Energy Outlook](#) stated that solar photovoltaic (PV) is now the cheapest source of electricity in history. Divisions could direct the



financial efficiencies gained through solar back into classrooms, rather than having to spend provincial education funds on Operations and Maintenance costs.

Second, solar installations serve as educational tools to teach students about environmental literacy, sustainability practices and social responsibility. The curricular connections in Science, Mathematics and Social Studies are numerous and just a few are listed below.

By not including the structural integrity and supports for solar in the original school designs, the government would be missing the opportunity to save money and educate and engage students.

Thank you for taking the time to consider our proposal. We look forward to hearing from you soon.

Sincerely

Handwritten signature of Devonna Klaassen in black ink.

Devonna Klaassen, Chair
Black Gold School Division

Handwritten signature of Bill Romanchuk in black ink.

Bill Romanchuk, Superintendent
of Schools/CEO
Black Gold School Division

Handwritten signature of Trisha Estabrooks in blue ink.

Trisha Estabrooks, Chair
Edmonton Public Schools

Handwritten signature of Darrel Robertson in black ink.

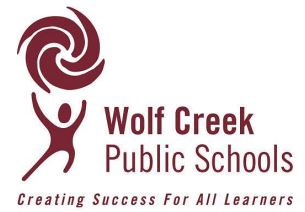
Darrel Robertson, Superintendent
of Schools
Edmonton Public Schools

Handwritten signature of Pamela Hensen in black ink.

Pamela Hensen, Chair
Wolf Creek Public Schools

Handwritten signature of Jayson Lovell in black ink.

Jayson Lovell, Superintendent
of Schools
Wolf Creek Public Schools



Cc: Shannon Flint, Deputy Minister, Infrastructure
Andre Corbould, Deputy Minister, Education
Kate White - Deputy Minister, Jobs, Economy and Innovation
Brad Rutherford, MLA for Leduc-Beaumont
Mark Smith, MLA for Drayton Valley-Devon
Honourable Rick Wilson, Minister of Indigenous Relations, MLA for
Maskwacis-Wetaskiwin



APPENDIX - Curricular Connections

Social 10-1:

S6 is the same as social 30-1/30-2 (**develop age-appropriate behaviour for social involvement as responsible citizens contributing to their community:**

- 1.5 Explore understandings and dimensions of globalization (political, economic, social, other contemporary examples) (PADM, ER, CC)
- 2.3 Accept social responsibilities associated with global citizenship (C, GC)
- 3.1 Recognize and appreciate the multiple perspectives that exist with respect to the relationships among politics, economics, the environment and globalization (GC, ER, PADM)
 - Recognize and appreciate impacts of globalization on the interdependent relationships among people, the economy and the environment (GC, ER, PADM)
- 3.7 Explore multiple perspectives regarding the relationship among people, the land and globalization (spirituality, stewardship, sustainability, resource development) (LPP, CC, ER, GC)
- 3.8 Evaluate actions and policies associated with globalization that impact the environment (land and resource use, resource development agreements, environmental legislation) (LPP, ER, GC)
- 3.9 Analyze multiple perspectives on sustainability and prosperity in a globalizing world (ER, LPP, GC)
- 4.3 Accept political, social and environmental responsibilities associated with global citizenship (C, GC, ER)
- 4.8 Analyze how globalization affects individuals and communities (migration, technology, agricultural issues, pandemics, resource issues, contemporary issues) (GC, LPP)

Social 10-2:

- 3.1 Recognize and appreciate multiple perspectives that exist with respect to the relationships among economics, politics, the environment and globalization (GC, ER, PADM)
- 3.2 Recognize and appreciate impacts of globalization on the interdependent relationships among the economy, people and the environment (GC, ER, PADM)
- 3.7 Explore multiple perspectives on relationships among people, the land and globalization (spirituality, stewardship, sustainability, resource development) (LPP, CC, GC, ER)
- 3.8 Analyze the impact of actions and policies associated with globalization on the environment (land and resource use, resource development agreements, environmental legislation) (LPP, ER, GC)
- 3.9 Examine multiple perspectives on sustainability and prosperity in a globalizing world (ER, LPP, CC)
- 4.3 Accept political, social and environmental responsibilities associated with global citizenship (C, GC, ER)
- 4.8 Examine how globalization affects individuals and communities (migration, technology, agricultural issues, pandemics, resource issues, contemporary issues) (GC, LPP)



Social 20-1/20-2

- 3.8 Analyze impacts of the pursuit of internationalism in addressing contemporary global issues (conflict, poverty, debt, disease, environment, human rights) (GC, PADM, ER)

The Role of Social Studies:

Social Studies develops the key values and attitudes, knowledge and understanding, and skills and processes necessary for students to become active and responsible citizens, engaged in the democratic process and aware of their capacity to effect change in their communities, society and world.

From the Values and Attitudes:

Demonstrate a consciousness for the limits of the natural environment, stewardship for the land and an understanding of the principles of sustainability.

The Land, Places and People

Exploring the unique and dynamic relationship that humans have with the land, places and environments affects decisions that students make and their understanding of perspectives, issues, citizenship and identity.

Economics and Resources:

Students will also critically consider the social and environmental implications of resource use and technological change.

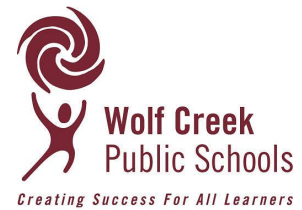
30-1

(30-1 and 30-2) S6:

Develop age-appropriate behaviour for social involvement as responsible citizens contributing to their community:

Related Issue 3:

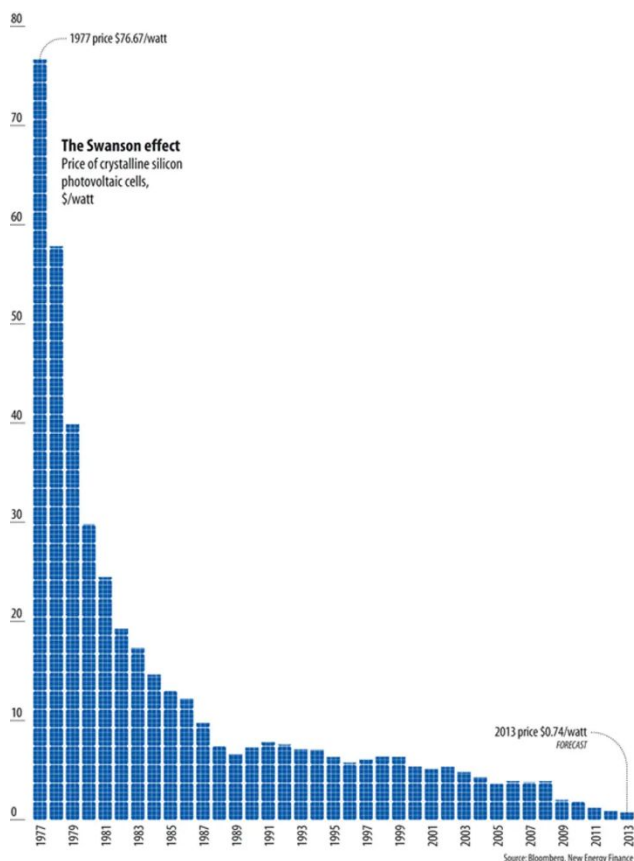
- 3.9 Evaluate the extent to which the principles of liberalism are viable in the context of contemporary issues (environment concerns, resource use and development, debt and poverty, racism, pandemics, terrorism, censorship, illiberalism) (PADM, ER, LPP)
- 4.2 Exhibit a global consciousness with respect to the human condition and world issues (C, GC)
- 4.3 Accept responsibilities associated with individual and collective citizenship (C, GC)
- 4.10 Explore opportunities to demonstrate active and responsible citizenship through individual and collective action (C, GC)



Social 30-2: Related Issue:

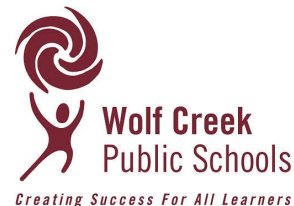
- 3.8 Evaluate the extent to which the values of liberalism are viable in the context of contemporary issues (environment concerns, resource use and development, debt and poverty, racism, pandemics, terrorism, censorship) (PADM, ER, LPP)
- 4.2 Exhibit a global consciousness with respect to the human condition and world issues (C, GC)
- 4.3 Accept responsibilities associated with individual and collective citizenship (C, GC)
- 4.8 Develop strategies to address local, national and global issues that demonstrate individual and collective leadership (C, GC)
- 4.9 Explore opportunities to demonstrate active and responsible citizenship through individual and collective action (C, GC)

Curricular outcomes in Science and Math that relate to solar power production.



Math 10C

- Interpret and explain the relationships among data, graphs and situations.
- 10C would have to be on the teacher's part to come up with solar specific questions and case studies, but it could be done.



20-1

- Solve problems, using the three primary trigonometric ratios for angles from 0° to 360° in standard position.
- Teacher-made questions regarding angle of the sun hitting panels
- Overall, very little relationship between math and specific cases that would directly involve students and solar power.

Science


Unit D Science 9

Develop, test and troubleshoot circuit designs for a variety of specific purposes, based on low voltage circuits (e.g., develop and test a device that is activated by a photoelectric cell; develop a model hoist that will lift a load to a given level, then stop and release its load; test and evaluate the use of series and parallel circuits for wiring a set of lights)

3. Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions

4. Describe and discuss the societal and environmental implications of the use of electrical energy

Students will: Analyze qualitative and quantitative data, and develop and assess possible explanations

- test the design of a constructed device or system 
- evaluate designs and prototypes in terms of function, reliability, safety, efficiency, use of materials and impact on the environment (e.g., evaluate the safety, durability, efficiency and environmental impact of a personally-constructed wet cell design)
- identify and correct practical problems in the way a prototype or constructed device functions

Many CTS modules with solar outcomes

ENS2130: Renewable & Nonrenewable Energy Resources

ENS2210: Sustainable Building Design & Construction

ENS2220: Energy Conservation Principles

ENS3130: Sustainable Energy

ENS3210: Sustainable Community Planning & Design