

DATE: March 6, 2017

TO: Board of Trustees

FROM: Board Chair Michelle Draper

SUBJECT: Motion re: District Solar Strategy

REFERENCE: [Trustees' Handbook – Section 5.2.2 – Notices of Motion](#)
[EA.BP - Infrastructure Planning Principles](#)

ISSUE

Notice of motion was served at the February 20, 2018, Board meeting.

BACKGROUND

In alignment with the Provincial focus on sustainable infrastructure and renewable energy, Edmonton Public Schools is proposing a strategic, achievable approach to installing roof-top solar arrays on District facilities.

The District Solar Strategy will provide programming opportunities for students and complement facility design efforts that promote energy efficiency and sustainability.

The Government of Alberta established the Climate Leadership Plan following recommendations made by the Climate Change Advisory Panel in 2015. Central to the Climate Leadership Plan is a focus on the use of renewable energy and a carbon levy – the proceeds from which are intended to support energy efficiency initiatives.

In alignment with the Government of Alberta's Climate Leadership Plan, the District has an opportunity to advance our focus on sustainable energy practices through the installation of roof-top solar arrays on a number of schools. A 2017 feasibility study commissioned by administration suggests that installing roof-top arrays on approximately 25 per cent of our schools will generate in excess of 40 per cent of the District's electricity needs and reduce carbon emissions by over 40 per cent. Administration has developed a multi-year strategic plan to address upgrades to roof structures and install solar arrays on 52 schools across the District.

Embedded in the Government of Alberta's 2017-2020 provincial budget is a total of approximately \$5.4 billion in support for the Climate Leadership Plan, with over \$1.8 billion identified in support for 'green infrastructure' and projects related to energy efficiency. Access to a portion of these funds will be instrumental in a successful District Solar Strategy.

RELATED FACTS

A retro-fit installation of solar arrays on select school roof-tops will model leadership in energy awareness and environmental literacy for generations. Solar arrays will place the Province's Climate Leadership Plan in the heart of Edmonton communities.

- Students will benefit from curricular ties, enhanced environmental literacy, and project-based learning opportunities.
- Communities will be able to tangibly experience the Government's Climate Leadership Plan in action.
- The District will be able to realize solar project cost efficiencies by allocating funds based on project needs, rather than using lump-sum blanket funds on a per-school basis.
- Carbon levy proceeds will be targeted for re-investment in energy efficiency initiatives.
- Provincial education funds are currently used to offset the District's plant operation and maintenance costs. Financial efficiencies as a result of the Solar Strategy—expected to be at least \$4 million annually—will be re-directed back into classrooms.

RECOMMENDATION

That the Board of Trustees presents the District's Solar Strategy to the Province and requests funding for implementation of the plan.

OPTIONS

1. Approve the recommendation.
2. Provide feedback and request changes to the recommendation for consideration.

CONSIDERATIONS and ANALYSIS

A strategic solar installation program will allow the District to be more intentional and efficient in the design and installation of solar arrays on schools.

The District's annual electrical utility costs are approximately \$8 million. Full implementation of the District solar strategy is projected to reduce electricity utility costs by approximately 40 per cent. Given that plant operation and maintenance (PO&M) costs for the District exceed annual PO&M funding, any savings on electrical utility costs will allow funds to be re-directed back into the District.

NEXT STEPS

Should the Board of Trustees approve the recommendation, the Board Chair will send a letter to the Minister of Education and the Minister of Environment and Parks requesting a meeting to present the strategy and discuss the funding required to support it.

MD:km