

Solar Energy Device Review Stakeholder Meeting Summary

BACKGROUND

On May 3, 2016, the City held a stakeholder engagement event which included representatives from the Edmonton Federation of Community Leagues, solar energy industry, electrical distribution and transmission utilities.

The following tables summarize the key themes and feedback we received.

Thank you to everyone who provided their input into this process. This summary of your feedback will be used to inform the amendments in the report.

NEXT STEPS

City staff will be preparing a series of recommendations to change existing regulations regarding solar energy devices. These recommendations will be informed by your input, technical reviews, and City policy. There will be additional opportunities for engagement before recommendations are presented to City Council. We look forward to your continued involvement as the project moves forward.

CONTACT

For inquiries regarding the Solar Energy Device Review Project, please contact:

Adam Sheahan

Planner

780-442-2582

adam.sheahan@edmonton.ca



Question 1: What issues/impacts on adjacent properties should the City consider during the development of land use regulations for building-mounted solar technologies?

HOW MIGHT THE ZONING BYLAW ADDRESS THESE ISSUES/IMPACTS?

APPEARANCE/ AESTHETIC

GLARE

- Less reflective than glass/windows and many exterior finishing materials
- Panels are intended to be as efficient as possible at absorbing rather than reflecting the sun's rays
- Panels treated with anti-reflection coating

APPEARANCE OF PANELS – ROOF MOUNTED VS. WALL MOUNTED

- Visual appearance/prominence of exposed walls vs. roofs is very different
- Roof mounted less visible, wall mounted more visible
- Solar walls will tend to be mounted to walls that are visible from the street to avoid shading from structures
- Panels should be treated the same as any other building material/exterior cladding

SETBACKS & STEPBACKS

- Shadowing on neighbours – if panels project a significant distance from the roof and are near the edge of the roof
- "Optimal efficiency" = cost to elevate vs gained efficiency; cost of elevating/inclining panels may outweigh gained efficiency – therefore less likely to project
- Projection into setbacks – potential for rain run-off/snow sloughing onto neighbour's property
- Eaves and roof ridge limits
- Standardized panel dimensions (1m x 1.5m – W x H)
- Panel size often doesn't align with roof dimensions – panels sometimes overhang or extend beyond eaves/ridge to maximize number of panels that can be installed
- Variance can address projections into setbacks beyond eaves (where appropriate)
- Solar panels on accessory building/structures (garage/shed/pergola) – less issues/impacts
- Garage Suite similar issues/impacts as principal structures
- Solar energy systems are a non-issue and have negligible impact on neighbours
- Environmental benefits outweigh any impacts
- Solar panels can be integrated into design of structures (decks/rooftop terraces) to serve as privacy screening

Question 2: Are there any existing regulations within the Zoning Bylaw that limit the adoption and installation of building-mounted solar energy systems?

HOW MIGHT THE ZONING BYLAW ADDRESS THESE ISSUES/IMPACTS?

HEIGHT

- Limitation of Development Authority to vary Height regulations (Zoning Bylaw – Section 11.4)
- Onerous process to appeal Development Permit to Subdivision and Development Appeals Board for minor variance to height restriction
- Limitation of variance power limits the potential to install solar energy systems on existing structures (constructed to or near max permitted height) if calculated as part of height
- Onerous appeal process may function as a disincentive to installation of green-technology
- Solar Energy systems should be treated the same as other roof mounted mechanical equipment – exempt from height restrictions
- Provide Height projection limits within given distances from the edge/facade of a building

Question 3: Some jurisdictions have stipulated that building-mounted solar installations that meet certain parameters or criteria can be exempted from the development permit process.

WHAT DO YOU THINK OF THIS APPROACH?

WHAT PROJECT CHARACTERISTICS, PARAMETERS, OR CRITERIA COULD/SHOULD BE CONSIDERED WHEN CONTEMPLATING EXEMPTIONS?

- Electricity production capacity limit (max power generation limit) – not a planning/land use issue
- Prescribe physical limits (setbacks, stepbacks, projections, Height)
- Limit exemption to roof mounted systems – development permit review/discretion for wall mounted systems necessary to avoid appearance of monolithic/monochromatic wall installations

Question 4: What risks or unintended consequences should the City be mindful of in the development of land use regulations for building-mounted solar technologies?

- Solar Energy Systems that are neglected or fall into a state of disrepair beyond the lifespan of the units
- Might large installations change the use of a building? (Residential to commercial)
- Use of sites in residential zones as micro power generators rather than for residential purposes

Question 5: Is there any other information, data, advice or perspectives that you or your organization would like the City to consider in regards to this issue?

IS THERE ANYONE OR ORGANIZATION THAT IS MISSING THAT NEEDS TO BE INCLUDED IN THE DISCUSSION?

- Ability of microgeneration systems to produce more than a household consumes is not a planning concern – jurisdiction of other regulators
- Limiting power capacity may become a roadblock/disincentive to installation of green technology (especially as technology develops and systems become more efficient)
- Ensure alignment of building code and development requirements
- Foster innovative applications of solar energy systems – ie: Parking lot solar canopies, embedded solar panels