

AGENDA INFORMATION	
<input checked="" type="checkbox"/> Regular Meeting	Date: March 8, 2021
<input type="checkbox"/> Other:	Date: _____

_____	_____	_____
Dept. Manager	GM/ Director	CAO

The District of North Vancouver REPORT TO COUNCIL

February 10, 2021

File:

AUTHOR: Megan Curren

SUBJECT: UBCM Resolution: Enabling Legislation for Green Roofs

RECOMMENDATION:

THAT the UBCM Resolution: Enabling Legislation for Green Roofs is supported for LMLGA consideration.

WHEREAS Green roofs serve multiple societal goals, including improved stormwater management, better regulation of building temperatures, reduced urban heat island effects, and increased urban wildlife habitat and biodiversity¹.

WHEREAS currently the *Local Government Act* allows a local government to require landscaping under section 527 and to control runoff under section 523, but the *Local Government Act* and *Community Charter* do not empower local governments to require and enforce the related building standard of construction (prohibited under the *Building Act*) or require and enforce maintenance of green roofs, including with security requirements:

THEREFORE BE IT RESOLVED that UBCM request that the Province amend the *Local Government Act* to empower local governments with enabling legislation, should they choose to implement it, to expressly require green roofs and enforce the related building standard of construction and maintenance of green roofs, including with security requirements.

REASON FOR REPORT:

Local governments in B.C. do not have the power to require and enforce the related building standard of construction (prohibited under the *Building Act*) or to require and enforce maintenance of green roofs, including with security requirements.

¹ Oberndorfer, E., Lundholm, J., Bass, B., Coffman, R. R., Doshi, H., Dunnett, N., ... & Rowe, B. (2007). Green roofs as urban ecosystems: ecological structures, functions, and services. *BioScience*, 57(10), 823-833.

BACKGROUND:

Environmental benefits of Green Roofs:

- The trees and plants on green roofs use shade and evapotranspiration to reduce temperatures on the roof surface, which in turn, reduces temperatures of the surrounding air and reduces the urban heat island effect.
- Green roofs improve the regulation of building temperatures, thus they decrease the need for energy use. In particular, this reduces the need for cooling technologies, which reduces emissions.
- Green roofs and photovoltaic panels have been shown to be complimentary technologies which enhance each other's performance.²
- With moderated urban air temperature and building temperatures, there is a reduced need for technological systems to moderate these, and thus reduced air pollution.
- The vegetation on green roofs positively impacts air pollutants through photosynthesis.

Biodiversity benefits:

- Green roofs contribute to increased urban wildlife habitat and biodiversity.
- In particular, these can act as a wildlife corridor to connect habitats of mobile species. Green roofs can be designed to specifically cater to pollinators.

Economic benefits:

- With improved building temperature regulation, there is a reduced cost to owners and occupants associated with cooling buildings.
- While the upfront costs of green roofs are higher due to increased labour and materials; cities with green roof bylaws for longer periods have been able to significantly reduce upfront costs.
- Green roofs reduce the exposure of roof waterproofing membranes to large temperature fluctuations, and green roof lifespans have been recorded between 30 and 75 years. This can be compared to a conventional roof lifespan of 15 to 20 years.
- Green roofs also create local jobs in design, construction, maintenance and product supply.

Human health:

- Green roofs provide an excellent green space which can operate as a variety of different functions.
- The COVID-19 pandemic has highlighted the value of access to green space, particularly in urban neighbourhoods.
- Green roofs also improve health through the availability of a natural view which has been found to decrease job stress, ailments, and the number of sick days taken by employees.
- Green roofs can serve as community hubs, increasing social cohesion, sense of community, and public safety.

² Köhler, M., Schmidt, M., Laar, M., Wachsmann, U., & Krauter, S. (2002). Photovoltaic panels on greened roofs. *Rio*, 2, 151-158.

Conclusion:

The *Local Government Act* should be amended to empower governments (should they chose to do so), to require and enforce the related building standard of construction (prohibited under the Building Act) or to require and enforce maintenance of green roofs, including with security requirements.

Options:

1. THAT the motion as presented in UBCM Resolution: Enabling Legislation for Green Roofs be supported; or,
2. THAT the motion is not supported.

Respectfully submitted,



Megan Curren
Councillor

REVIEWED WITH:

<input type="checkbox"/> Community Planning	_____
<input type="checkbox"/> Development Planning	_____
<input type="checkbox"/> Development Engineering	_____
<input type="checkbox"/> Utilities	_____
<input type="checkbox"/> Engineering Operations	_____
<input type="checkbox"/> Parks	_____
<input type="checkbox"/> Environment	_____
<input type="checkbox"/> Facilities	_____
<input type="checkbox"/> Human Resources	_____
<input type="checkbox"/> Review and Compliance	_____

<input type="checkbox"/> Clerk's Office	_____
<input type="checkbox"/> Communications	_____
<input type="checkbox"/> Finance	_____
<input type="checkbox"/> Fire Services	_____
<input type="checkbox"/> ITS	_____
<input type="checkbox"/> Solicitor	_____
<input type="checkbox"/> GIS	_____
<input type="checkbox"/> Real Estate	_____
<input type="checkbox"/> Bylaw Services	_____
<input type="checkbox"/> Planning	_____

External Agencies:

<input type="checkbox"/> Library Board	_____
<input type="checkbox"/> NS Health	_____
<input type="checkbox"/> RCMP	_____
<input type="checkbox"/> NVRC	_____
<input type="checkbox"/> Museum & Arch.	_____
<input type="checkbox"/> Other:	_____

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