

August 8, 2016

To: Planning & Sustainability Commission
Bureau of Planning and Sustainability
1900 SW 4th Ave, Suite 7100
Portland, OR 97201

From: Green Roof Information Think-tank (GRiT)
4135 SE 67th Ave.
Portland, OR 97206

Subject: Ecoroof Requirement

Dear Planning & Sustainability Commission,

On behalf of the Green Roof Information Think-tank (GRiT), we write to reiterate our strong support for the ecoroof requirement in the Central City 2035 plan (33.510.243) and express concerns with the recent changes introduced which will reduce its efficacy.

Rooftops are an overlooked and under-utilized resource that greatly impact the public realm. As the city becomes more densely developed, we need to use all available space, and rooftops represent many opportunities. Traditional approaches to rooftop design are not only antiquated but also toxic. Ecoroofs are far more than stormwater treatment facilities. Ecoroofs provide many economic, environmental, and human health benefits, while saving building owners money by significantly extending the service life of roof. *All these goals should be represented in the purpose of the ecoroof requirement.*

We are particularly concerned with the staff decision to *reduce* the maximum required ecoroof coverage from 70% to 60% of roof area. This change takes the proposal in the wrong direction and diminishes the short and long-term benefits of the requirement for the public and likely for the building owner as well. Many of the functions of ecoroofs, particularly in combating urban heat island, increase linearly to exponentially with ecoroof size. In addition, the 20,000 sf net floor threshold for the requirement will significantly limit the number of ecoroofs in the Central City, further limiting the cumulative landscape-scale benefits of installing ecoroofs on numerous downtown buildings. *We advocate increasing the required ecoroof percentage and establishing a lower building size threshold- based on roof area- for the requirement. We recommend the ecoroof requirement of 90% roof coverage apply to new buildings in CX, EX, RX, and IG1 zones with a roof area of at least 5,000 square feet.*

There does not appear to be anything in the proposed code that would prevent installation of a standard roof on the portion of the roof not required to be ecoroof. This would most likely eliminate the benefits of reducing long-term roof replacement costs because a properly designed and installed ecoroof will outlast standard roofing. *There needs to be some demonstrated need for a roof to not be an ecoroof, for example to install a patio or other human access.* Rooftop space is too valuable to the public realm to be left underutilized.

Ecoroofs and solar should be combined. There is no need for a solar exemption. Ecoroofs and solar energy systems are mutually beneficial, and when they are constructed together the ecoroofs are more effective and the solar systems are more efficient. Combining solar and ecoroofs is not new in Portland. There are several large projects such as the Ramona Apartments with 32,000 sf of ecoroof and solar panels. A number of buildings in Portland combine ecoroofs and solar including Portland's historic EcoTrust Building, the International Harvester Building, the East Multnomah County Courthouse and the Vestas headquarters building. In other countries ecoroofs and solar panels are often built in tandem, and in cities such as Stuttgart and Freiburg, Germany and Linz, Austria there are many examples of combined ecoroofs and PV installations.

In weighing these policy decisions, we urge the Planning and Sustainability Commission to consider the following:

1. Comprehensive Plan Language:

The Commission needs to fully appreciate the aspirations of the new comprehensive plan in this decision. The value of ecoroofs in helping maintain health and livability in denser urban neighborhoods cannot be overstated. The new, proposed Comprehensive Plan recognizes this fact by envisioning a new relationship between the built and natural environment in Portland. Throughout its proposed goals and policies, the new Comp Plan calls for a rich, intimate, and daily human connection to nature in order to foster improved public health and sense of place for all Portlanders while improving air and water quality, and native biodiversity. Ecoroofs are essential to achieving the Comp Plan's goals in our most dense and densifying neighborhoods.



This conventional roof provides no human health or environmental benefits, while it creates a heat island and an ugly view for adjacent building dwellers.



The Ramona Apartments' roof elegantly and efficiently combines solar panels and an ecoroof creating an attractive view, energy savings, habitat, and cooler, cleaner air quality.

2. Relationship between incentives and requirements & Portland's policy history:

Portland has a history of supporting ecoroofs. Until recently, that support led to Portland's international reputation as a leader in the ecoroof industry. In 1999 the City of Portland was the first in the nation to recognize ecoroofs as a sustainable stormwater approach with the adoption of the City's first Stormwater Management Manual. In 2001 Portland included ecoroofs as an FAR Bonus option for a new urban design sustainability approach. Portland again was the first city in the USA to include ecoroof incentives in its planning regulations. Portland again set the pace beyond any other US city in 2008 with the adoption of a five-year direct ecoroof incentive program. The program also helped build the local green roof industry.

Portland is no longer a leader. Washington DC, Chicago, Seattle, San Francisco, Philadelphia, and New York City are touted as models of green roof incentives and regulations. And now, even smaller cities such as Milwaukie WS, Nashville TN, Devens MA, and Syracuse NY have ecoroof incentives and/or requirements. Portland has fallen off the list of cities with the fastest growth in ecoroofs.

The most successful efforts to expand ecoroofs in Europe and North America have first established incentives and then transitioned to ecoroof requirements as the local ecoroof industry expands and installation costs come down. Portland is ready for strong and robust ecoroof requirements that eventually should be city-wide.

Thank you for the opportunity to provide comments on the draft Central City 2035 Plan. We would be happy to provide additional technical information and data that support an ecoroof requirement. Please feel free to contact Elizabeth Hart with any questions or for more information.

On behalf of our 400+ member group,



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CC Mayor Charlie Hales
Commissioner Nick Fish
Commissioner Amanda Fritz
Commissioner Steve Novick
Commissioner Dan Saltzman
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