

## Green Roofs and Xeriscape Planting that Contribute to Sustainable Urban Green Space

**Authors :** Derya Sari, Banu Karasah

**Abstract :** In the recent years, urban green areas decrease dramatically as a result of increasing industrialization and population growth. At the same time, green spaces provide many ecosystem services such as controls of air pollution, noise reduction, prevents flooding and reduces the stress in the urban areas. Therefore, the plants help to these areas to get more livable and active, and also plants are one of the most significant identity elements in these open spaces. Roof gardens comes significant design comprehension as a result of global warming and also they contribute to cities with regard to ecological, economic, visual and recreational aspects. This study is mainly based on evaluation potential of green roofs and xeriscape planting design approach of Artvin (Turkey) known that generally has a remarkable floristic richness. Artvin is located on a sloping terrain, and the amount of green spaces that can be used is very limited in this city. Therefore, green roofs approach should be evaluated to supply urban green space sustainability. This study shows that it is appropriate about 20 perennial plants for green roofs and xeriscape planting design in Artvin city center. Usage of native plant species would be support to sustainable urban green spaces.

**Keywords :** Artvin, green roofs, urban green spaces, xeriscape planting

**Conference Title :** ICSAUD 2015 : International Conference on Sustainable Architecture and Urban Design

**Conference Location :** Kyoto, Japan

**Conference Dates :** November 12-13, 2015