

Accepted Manuscript

Title: Planning for a green city: The Green Factor tool

Author: Sirkku Juhola

PII: S1618-8667(17)30546-0
DOI: <https://doi.org/10.1016/j.ufug.2018.07.019>
Reference: UFUG 26187



To appear in:

Received date: 5-9-2017
Revised date: 17-7-2018
Accepted date: 20-7-2018

Please cite this article as: Juhola S, Planning for a green city: The Green Factor tool, *Urban Forestry and Urban Greening* (2018), <https://doi.org/10.1016/j.ufug.2018.07.019>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Planning for a green city: The Green Factor tool

Sirkku Juhola 1*

1. Research Programme for Ecosystems and Environment and Helsinki Institute of Sustainability Science, University of Helsinki, Finland

* Corresponding author, sirkku.juhola@helsinki.fi

Highlights

- Planning tools have rarely been assessed after their use
- Green Factor tool aids the planner in increasing the quantity and quality of green areas
- Green Factor tool is useful in the planning phase and simple to use
- Existing regulation and planning guidelines hinder its use

Abstract

In recent years, new planning tools have emerged to aid planners to achieve multiple goals to sustainability. The Green Factor tool has been adopted by some cities to increase the share and effectiveness of green areas. This short communication asks how useful the Green Factor tool is and how it fits with the existing planning procedures regarding green areas through a qualitative case study in the city of Helsinki. The results show that while the tool functions well, improvements could be made in relation to monitoring, for example. Also, an ambitious target set in the tool could encourage or force developers to aim higher with the planning of green areas and construction, but existing regulations challenge its use.

Keywords: green factor tool, green areas, planning, planning tools, sustainability

Keywords: green factor analysis, yard planning, planning tools, sustainability

1. Introduction

Urban green areas, which are integral to human health, represent a complex and necessary feature of the urban landscape (Momm-Schult et al. 2013; Schäffer & Swilling 2013; Tzoulas et al. 2007). Green areas provide ecosystem services, either through local climate regulation (Jim & Chen 2008), carbon sequestration (Strohbach & Haase 2012) or reduction of stormwater runoff (Ellis 2013), amongst other things. There is an increasing pressure for the urban planning sector to be able to account for all these ecosystem services.

There has been an emergence of new planning and modelling tools that are both process and substance-oriented (Ben-Zadok 2010) for a growing number of concerns facing urban planners (Smith 2015; Devuyt & Hens 2001; Gil & Duarte 2013), and the planning of green infrastructure and green areas, in particular (Thorén, 2000). The Green Factor tool, which appears under varying names, has emerged in many cities around the world to assess the sustainability of landscape designs and construction based on the proportion of green areas and built-up areas. It has been used for example in Seattle, WA (Seattle Department of Construction & Inspections 2017), Berlin, Germany (Senate Department for the Environment, Transport and Climate Protection 2017), Helsinki, Finland (City of Helsinki 2017) and Southampton, UK (Southampton City Council 2017).

Download English Version:

<https://daneshyari.com/en/article/6549098>

Download Persian Version:

<https://daneshyari.com/article/6549098>

[Daneshyari.com](https://daneshyari.com)