

Accepted Manuscript

The use of 3D GIS to analyse the influence of urban context on buildings' solar energy potential

Rita Machete , Ana Paula Falcão , M. Glória Gomes ,
A. Moret Rodrigues

PII: S0378-7788(18)30958-7
DOI: <https://doi.org/10.1016/j.enbuild.2018.07.064>
Reference: ENB 8735



To appear in: *Energy & Buildings*

Received date: 26 March 2018
Revised date: 22 June 2018
Accepted date: 29 July 2018

Please cite this article as: Rita Machete , Ana Paula Falcão , M. Glória Gomes , A. Moret Rodrigues , The use of 3D GIS to analyse the influence of urban context on buildings' solar energy potential , *Energy & Buildings* (2018), doi: <https://doi.org/10.1016/j.enbuild.2018.07.064>

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.

Highlights

- The impact of the urban context on buildings' solar energy potential was assessed
- 3D GIS was used to build a city block in Lisbon and surrounding urban context
- Three solar radiation tools associated with 2.5D and 3D approaches were used
- Influence of context size, relief, built surroundings and claddings were evaluated
- The mean effect of relief and built surroundings over the city block was about 30%

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/8941551>

Download Persian Version:

<https://daneshyari.com/article/8941551>

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