



International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.12 No.02, pp 243-253, **2019**

Assessment of The Utilization of Local Wind in Urban Area of Makassar City Indonesia

Sungkono¹*, Sukoso², Abd. Makhsud³, Rudy Sulistyono⁴, Juhana⁵

¹Doctoral Program of Environmental Science, Postgraduate School, Universitas Brawijaya,

²Department of Fisheries Product Technology, Faculty of Fishery and Marine Sciences, Universitas Brawijaya, Indonesia

³Department of Mechanical Engineering, Faculty of Engineering, Indonesia Muslim University, Indonesia

⁴Department of Agronomy, Faculty of Agriculture, Universitas Brawijaya, Indonesia

Abstract : The coastal area has natural and physical characteristics that are very different from the land. The coastal area has local wind potential which can be used to improve air quality in urban areas. This study aims to assess the usefulness of the wind in urban solid cashiers. This research was carried out in the city of Makassar, namely three city area locations that were selected as observation units to be studied, each with an area of 100 m. To support this research, data on wind speed and direction, and air temperature from the Makassar Potere Maritime Meteorological and Geophysical Station have been collected for five consecutive years (2012-2017). The measurement of microclimate conditions is carried out five times from morning to evening during sunny weather at the same time at all measuring points. The analysis is carried out quantitatively using a formula from Edward Ng (2006) as an indicator. The results of the analysis show that the Makassar sea breeze is very useful for planning the built environment.

Keywords: local wind, urban dense area.

Sungkono et al / International Journal of ChemTech Research, 2019,12(2): 243-253.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120232
