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MUNICIPAL WASTE MANAGEMENT AND PUBLIC AWARENESS STRATEGIES UNDER THE ZERO-WASTE POLICY: A CASE STUDY OF GAZIANTEP, TURKEY

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Abstract

Increasing population, industrial development and urbanization caused the solid waste problem in the cities. Zero Waste is a strategy for solving the waste problems in the municipalities. The Zero Waste studies in Turkey were started gradually in June 2017 and planned to implement the project gradually to entire country. Activities have been carried out in Gaziantep since 2018 and were quickly adopted by all public institutions and organizations. This study aimed to evaluate the waste management works of Gaziantep Municipality in line with solid waste potential of city and disposal activities towards the Zero Waste target such as source point separation, recyclable wastes, composts, sanitary landfills, biogas power plant and education and awareness raising approaches. In 2018, with the start of Zero Waste studies, it was observed that the amount of waste in Gaziantep Central Solid Waste Landfill decreased by 6%. The increase in 2020 was related to the COVID-19 pandemic. From 2019 to 2020, with the municipality's solid waste management efforts, activities carried out to raise awareness of students and employees have also yielded as 39%, 44% and 82% increased collected solid waste by Waste Vending Machines for metal, plastic and glass, respectively. As a result of waste reduction activities, 287.681 trees, 448.444 m³ of water, 158.095.695 kWh of electricity and 636.883 liters of oil consumption were saved and 611.444 tons of CO₂ emissions were avoided.

Key words: environmental awareness, municipal activity, recycling, solid waste, zero waste

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