

## Assessment of Waste Management Practices in Bahrain

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**Abstract :** The Kingdom of Bahrain, a small island country in the Gulf region, is experiencing fast economic growth resulting in a sharp increase in population and greater than ever amounts of waste being produced. However, waste management in the country is still very basic, with landfilling being the most popular option. Recycling is still a scarce practice, with small recycling businesses and initiatives emerging in recent years. This scenario is typical for other countries in the region, with similar amounts of per capita waste being produced. In this paper, we are reviewing current waste management practices in Bahrain by collecting data published by the Government and various authors, and by visiting the country's only landfill site, Askar. In addition, we have performed a survey of the residents to learn more about the awareness and attitudes towards sustainable waste management strategies. A review of the available data on waste management indicates that the Askar landfill site is nearing its capacity. The site uses open tipping as the method of disposal. The highest percentage of disposed waste comes from the building sector (38.4%), followed by domestic (27.5%) and commercial waste (17.9%). Disposal monitoring and recording are often based on estimates of weight and without proper characterization/classification of received waste. Besides, there is a need for assessment of the environmental impact of the site with systematic monitoring of pollutants in the area and their potential spreading to the surrounding land, groundwater, and air. The results of the survey indicate low awareness of what happens with the collected waste in the country. However, the respondents have shown support for future waste reduction and recycling initiatives. This implies that the education of local communities would be very beneficial for such governmental initiatives, securing greater participation. Raising awareness of issues surrounding recycling and waste management and systematic effort to divert waste from landfills are the first steps towards securing sustainable waste management in the Kingdom of Bahrain.

**Keywords :** landfill, municipal solid waste, survey, waste management

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