

1. Introduction
2. The whole project is segregated into mainly six parts that are Introduction & Background, Current Situation, the efforts that are being made, Discussion, Conclusion, Recommendation. By discussing all six segments we will cover the whole scenario of the Waste Management Policies in the UAE.
3. What is Waste Management? Wastage management is the collection, transport, processing, or disposal of waste materials, usually ones produced by human activity, to reduce their effect on human health or local aesthetics or amenity. Wastes are categorized mainly into two types, hazardous and non-hazardous. Non-hazardous wastes are waste that does not cause serious environmental problems and can be easily disposed of whereas hazardous wastes are those that impact our environment severely. In the past few years, The UAE has witnessed a massive surge in economic growth in sectors like construction, industrialization, commercial, and agriculture. With this advancement, the waste generation got increased multifold resulting in UAE's waster generation being among the highest in the world, which can hurl significant impact upon the environment in protecting its ecosystem and biodiversity and can create a massive scarcity of water in the long run.
4. Among all the GCC countries UAE has the highest level of waste generation. The country has 9.2 million people and generates an average of 29 million tons per annum. The waste generation ratio per capita in UAE is 1.9 to 2.5 kilograms per day. According to a study in 2017, only 20% of the waste produced was recycled, which can easily be deciphered from the figure 1. From the Table1 we can get a glimpse of the amount of solid waste generated in Abu Dhabi from 2012 to 2019
5. Several other studies have shown that The Average daily municipal per capita waste is 1.29kg. Dubai, the second largest emirate of the UAE produces about 6.4 million tons of non-hazardous waste, stating from 2017. The rate of cycling in the emirate was 28% in 2017, recycling nearly 2.6 million tons of non-hazardous wastes in 2017. Besides all this according to the data, published by the UAE federal statistics, in 2016 a waste production of 2.845 million tons collected and managed by 1.2 million people.
6. From Figure 2 of the landfills ratio of waste generation, it can more easily be deciphered that About 77% of the waste generated in UAE ends up in landfills. And Figure 2, The landfill ratio of Hazardous waste gives us a clear picture of the fact that in 2017, Abu Dhabi generated 9.657 million tons of solid waste, out of which 98.1 percent was a non-hazardous waste.
7. Figure 4, How wastes in UAE are distributed in different categories clearly explains how different categories of wastes are distributed in UAE in what proportion. Where construction demolition was accounted for more than 35 percent of the waste. Industrial and commercial was accounted for 33 percent of waste. Another 10% of the waste was from agriculture, and other non-hazardous waste accounted for the remaining percentage.
8. To address this issue the government of UAE came up with numerous ingenious efforts and solutions. The waste management efforts are the UAE government's aim to convert waster energy into treating wastewater. Its municipality's preference on recycling of the wasters over burning, recycling, and energy conversion of waste, the establishment of state-of-the-art waste management center. The establishment of a waste management center and lastly incorporation of New technologies and improved waste separation systems are also used for waste management.

9. UAE has taken up an ingenious technology of converting waste energy into treating wastewater and controlling the movement of hazardous and non-hazardous waste. Moreover, the organic wastes found on the dumpsites are more prone to emitting methane which is a harmful greenhouse gas. To overcome that problem the municipality of UAE started stressing more on recycling the wastes rather than burning them.
10. Besides putting stress on recycling the wastes are generally being recycled and converted into energy. And the incorporation of technologies had improved waste separation systems which is the separation of hazardous and non-hazardous wastes and made waste management easier and more efficient.
11. Above all these, the most important step that UAE had taken to manage their wastes is establishing a Centre of Waste Management system which would help them frame policies, strategies, and contractual system of managing waste across the Emirates. Moreover, setting up companies like Bee'ah which is set up by the municipality of Sharjah and its developed state-of-the-art waste management centers to process and recycle waste helping them closely monitor the landfill contents. Lastly, The municipality aims to establish the largest plant in the Middle East for solid waste conversion. The project is expected to cost AED 2 billion with the aim to reduced landfills by 75% by the end of 2021.
12. For the past few years, the country is successfully managing its waste by recycling and converting waste to resources and energy with the help of new ingenious technologies. The government of Abu Dhabi has formulated a Center of Waste Management called Tadweer which is helping the government frame policies as a strategy to manage their waste. Likewise, Bee'ah Dubai Emirate opened a recycling Hub in 2019, EnviroSource, an electronic recycling facility aiming to achieve zero landfills. The main aim of these companies and their strategies are to achieve the country's zero-waste-to-landfill target and the goal of diverting 75% of its municipal solid waste from landfills.
13. Waste is a global environmental concern that has several detrimental impacts both on our health and the environment be it hazardous or non-hazardous. UAE is currently among the leading countries in the world with non-hazardous waste concerns. Therefore, an effective management policy is the need of the hour. And waste management companies like Enviro Serve and Bee'ah are effectively framing policies and strategies to help the country achieve zero-waste-to-landfill targets.
14. There should be no denying the fact that the government of the UAE has done a great job in dealing with the waste management crisis. But to manage its waste management, the country should put more stress on Separating mixed recycling from general waste, which can help divert waste from going to landfills. Secondly, this must be ensured that the mixed recycling is not contaminated by following the "two bin" method to separate general waste from mixed recycle. Government should start adopting communication campaigns that engage the public and employees about the significance of proper waste management to instill awareness among people. The remaining Emirates should also consider themselves partnering with energy companies as Dubai which would help them manage the whole thing more precisely. And If the aforementioned recommendations are followed properly, then UAE might achieve its target of diverting 75% of the waste from landfills sooner than they planned.

15. Thank You

