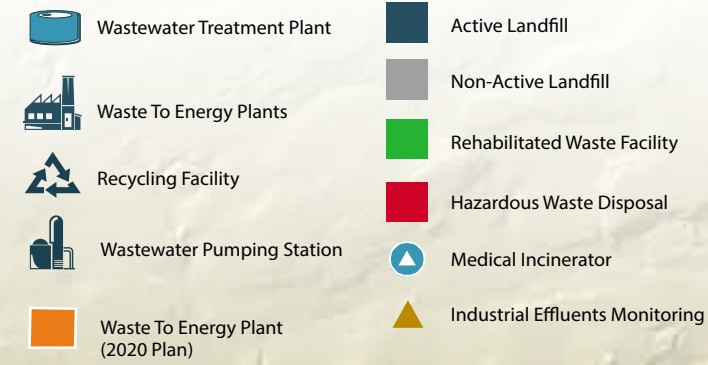


Waste Management Features



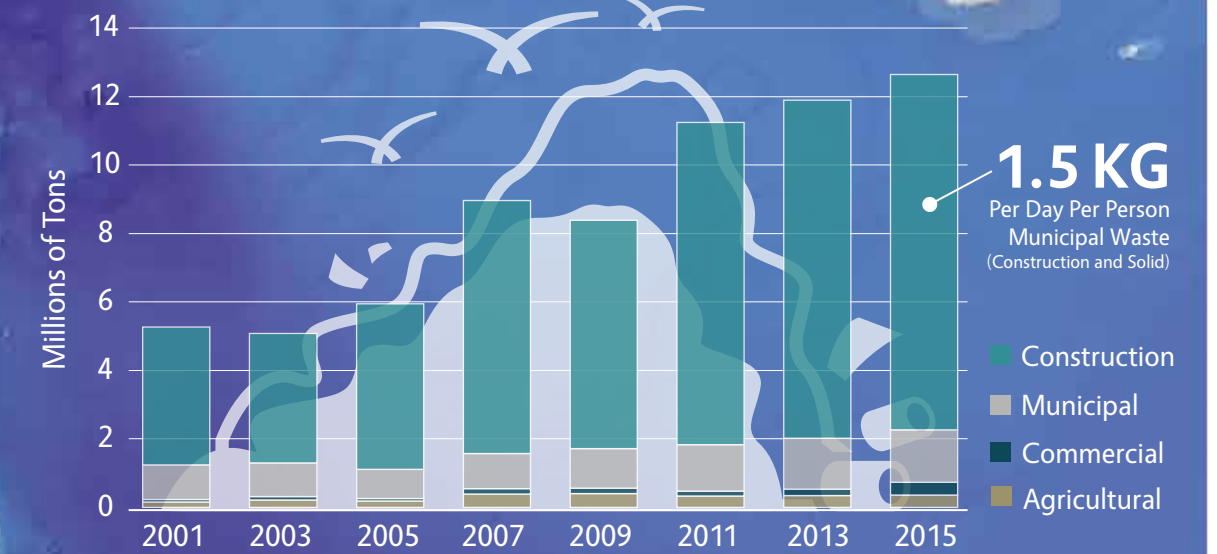
WASTE

SOLID WASTE MANAGEMENT

Since the turn of the century, a large increase in population and high consumption rates per capita have led to a two-fold increase in solid waste generation—from 5.8 million tons in 2001 to 11.3 million tons in 2013 (Kuwait Central Statistical Bureau, 2015). Of the 18 existing landfills occupying 45.5 km² of Kuwaiti land, only three are active. To reduce future losses in land and create a less wasteful system, the Kuwaiti Government is increasing waste-to-energy and recycling capacities at existing facilities. A new waste-to-energy facility will be built in Kabd and will receive up to 50% of the total municipal solid waste generated in Kuwait. The facility will burn waste to produce energy and electricity.

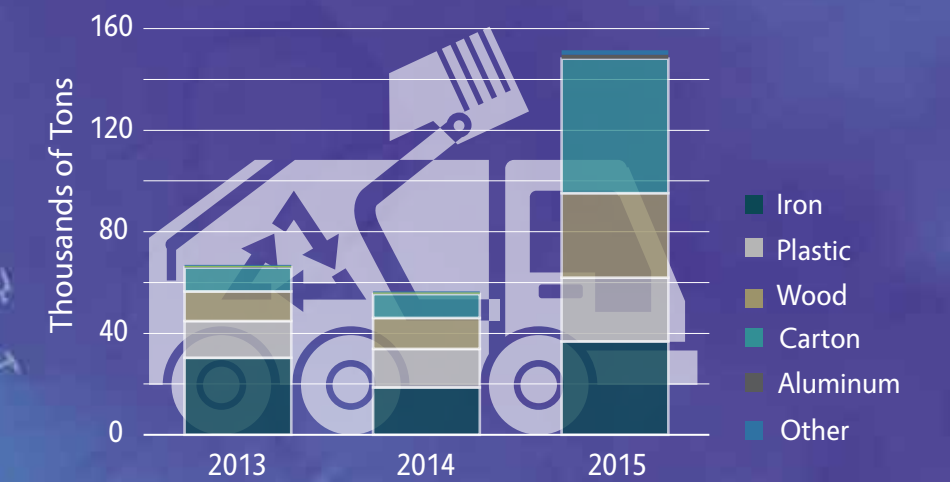
WASTEWATER MANAGEMENT

Municipal wastewater is collected through a sewerage system covering all urban and suburban areas in Kuwait. The Ministry of Public Works has built over 6,000 km of sewers and pipelines. An additional 1,028 km are anticipated in the Master Plan 2045. In 2016, about 319 million m³ of sewage water was collected and treated at 6 wastewater treatment plants. More than 259 million m³ of treated waste water is used for irrigation of greenery, agricultural areas and artificial lakes. Due to increased inflows of municipal wastewater, an expansion of 715,000 m³/day in treatment capacity is planned to be completed in 2020 at the Umm Al-Hayman, Kabd and As-Sulaybiyah treatment facilities. Industrial liquid wastewater is collected, transported and treated at Al-Wafra Industrial Wastewater Treatment Plant in the south of the country.



Solid Waste in Landfills

The quantity of municipal waste generated has risen from under one million tons during the early-to-mid-2000s to over 1.5 million tons in 2015. Due to high standards of living and rapid economic growth, Kuwait has high per capita waste generation (KEPA, 2016).



Recycling and Segregated Waste

With the rapid urbanization of Kuwait, the issue of waste management becomes ever more important. Climate change, as well as the desire to reduce the country's carbon footprint, has led to increased calls for more robust recycling and waste management processes. The recycling industry in Kuwait continues to develop, with both private and public efforts underway to collect and dispose of recyclable materials separately from landfill-bound waste streams. KEPA is at the forefront in the efforts to improve waste management and recycling in Kuwait (KEPA, 2016).

Emergency Industrial Wastewater Treatment Plant - KM30

Um Al-Hayman