Project: WasteWise

Moto: Recycle Waste, Rejuvenate World

Introduction

An individual, in a developing nation, yields 0.45 to 0.50 kg of municipal solid waste on average — a World Bank estimation. Bangladesh, coalescing all municipalities and towns, generates approximately 18,000 tons of waste per day - estimated to outweigh 47,064 tons in the following 2 decades - which do not get treated or disposed of in a scientifically smart manner. The concerning project, namely WasteWise, has been developed to resolve the waste management disruption in Bangladesh.

Project Vision

The project intends to place in force sustainable schemes of waste management loop **(Generation → Collection → Segregation → Treatment → Generation ...)** along with imperturbable, methodical, IoT-incorporated, most advanced technology-operated, and innovative systems of reducing waste generation.

Project focus

- **Generation, collection & segregation solution**

How would we manage to segregate the generated trash and collect it scientifically to lessen environmental deterioration?

We would like to introduce an application software - namely **'TrashWallet'** - in partnership with the City Corporation which could be used by both the general mass and trash collectors of city corporations. A considerable amount of smart trash cans would be set up in different regions of Metropolia which could perform wireless communication with an operational server. TrashWallet could suggest, to the general mass, all the probable biodegradable & non-biodegradable wastes could be yielded in a single-day analyzing daily data. It could locate all the smart trash cans using the API of Google Maps. Moreover, TrashWallet provides the productivity of secure online payment of trash bills through mobile banking platforms. Furthermore, the daily trash records are stored, for a certain period, in a database and also in the application software termed **'TrashPatrol'**; records could be inspected by the user. The records are used to collect waste from specific locations by city corporations.

- **Treatment solution**

How would the waste substances be treated and manipulated for next-generation energy production?

In cooperation with the Government of Bangladesh and global institutions like JICA and the UN, WasteWise looks forward to giving a curtain-raiser with **'Sanitary Landfill Project'** — a scientific and engineered methodology which impacts composting wastes in terms of waste biodegradability, atmospheric suitability, moisture content, hazards elimination, and methane gas emission regulation. Moreover, the emission of methane gas allows for the production of electricity, which might very likely tie the concentration of non-government or private sectors, initiating possibilities for economic expansion.

WasteWise also aspires to set up recycling plan units for plastic and paper products.