WASTE MANAGEMENT

Waste management key component of sustainable practices in FM

With a burgeoning population and the ever increasing economic activities, particularly in the Middle East region, there has been a rapid increase in the waste being generated alongside these fast track developments, particularly in the UAE. In fact, some of the Middle Eastern countries are among the highest generators of waste worldwide. Waste management has attained paramount importance in the region and many government and private entities are making a concerted effort to manage their waste in a scientific and innovative manner. For instance, the Dubai Municipality recently inaugurated its gas-to-energy project at Al-Qusais landfill. It is the first time that landfill gas is converted to generate 1MW electricity in the Middle East.

Naturally, waste management has also become one of the key components in facilities management (FM), particularly in the UAE. We take a look at the solid waste management practices in the FM sector in the country including applications in the hospitality segment and other major facilities such as airports, malls, residential, industrial areas. Service providers and suppliers in the FM industry share their experiences with Swaliha Shanavas.

Waste management is one of the biggest challenges facing fast-growing economies such as the UAE and it is crucial to explore innovative and sustainable ways to manage waste, says Mahmood Rasheed, COO, Imdaad. "Today, waste management is one of the most important components of FM. The UAE, often tagged as one of the largest producers of waste in the GCC region, is now leading the way by spearheading various waste management projects and initiatives."

To deal with the growing waste problem, Imdaad has advocated the establishment of an integrated waste management programme that comprehensively deals with the waste issue in different countries in the GCC. Such a programme covers all areas related to waste management, including awareness campaigns, collection, disposal, and recycling. Traditionally, wastes have been disposed in landfills, which is unsustainable. To curb this issue, Imdaad plans to set up its own material recovery facility and to initiate a recycling programme in collaboration with its clients and various communities, says Rasheed.

The company's waste management services include waste collection and disposal, medical waste collection and disposal, and confidential data destruction. Besides, Imdaad is looking to establish strategic partnerships for further service expansion and are offering their expertise in waste management through new joint ventures to reach out to various market segments, says the COO.

Citing examples of their services and awareness campaings, he says in 2010 Imdaad placed multi-bin systems on each floor of the Burj Khalifa to encourage tenants to recycle and recyclables like paper, cartons, plastics,



Mahmood Rasheed, COO. Imdaad

metals and glass have been picked up daily by the company's collection team. A total of 86.4 tons of recyclable waste and 2,675 litres of used cooking oil have been collected from Burj Khalifa.

In support of Dubai Municipality's 'My City, My Environment' initiative, the organisation distributed two 240-litre waste bins to each villa in the Mizhar 1 area. They also collect general waste daily and recyclables three times a week, while door-to-door campaigns are being conducted to increase awareness about the importance of recycling and segregating waste. Imdaad had concluded a few major contracts in their favour like Emirates Living, Arabian Ranches, Dubai Airport free Zone and IHG hotels at Dubai Festival City.

Suvarna Jeetendra, Managing Director of Blue Stream Environmental Technology LLC,



WASTE AND RECYCLING ME VOI.:

says the FM sector over the last few years has catapulted into the limelight owing to the large number of projects that have been delivered, and this in turn has impacted the demand for waste management equipments in the region, especially urban waste. "Of course, the market has matured and so have the demands of the end users - nobody is looking for one size that fits all solutions anymore. FM challenges in a large mixed development of residential buildings are very different than that of a large hotel development or mall development - each of them have their own individual requirements. As solution providers we have to be ready to offer tailor-made products for each of these customers with flexibility in implementation."

Blue Stream provides waste management solutions for all kinds of urban waste problems and these could include waste containment to transportation, says the company's Managing Director Suvarna Jeetendra. "We have been active for over 15 years and have a regional presence in UAE, Qatar, Oman and India. We have been actively serving all sectors with their waste management requirements, but municipalities and major entities from various sectors have been our main customers. Few of our esteemed clients include Dubai International Airport, Palm Jumeirah Nakheel, Burj Dubai Emaar, Barwa Project Qatar, New Doha International Airport."

In the hospitality sector, Ramada Hotel & Suites Ajman has been leading the way in sustainable initiatives by not only managing their waste scientifically but by also putting to good use most of the food and other waste



Suvarna Jeetendra, Managing Director of Blue Stream Environmental Technology LLC



Paresh Karia, Deputy General Manager, Waste Management Solutions (WMS), Dulsea



Compost machine at Ramada Hotel

generated at the facility. The hotel has been appreciated for its efforts, having received the Wyndham Green Award recently. The award recognised the property's commitment to the environment through its groundbreaking initiatives such as the Zero Landfill Project and Urban Farm.

Many major facilities are fast becoming aware of the issues related to waste management and the need for dedicated services to deal with their waste in the right manner. For instance, Dubai Airports recently appointed Dulsco Waste Management Services (WMS) to handle waste at both its airports, Dubai International and Al Maktoum International at Dubai World Central. The contract's scope of work includes the collection and transfer of waste from the terminals and aircraft, the cleaning of airport equipment and the separation of recyclable waste.

Paresh Karia, Deputy General Manager, Waste Management Solutions (WMS), Dulsco says all the waste material collected is source separated. "The segregation of recyclables is done at source to ensure they don't get contaminated by getting mixed with general waste. The nature of airport operations is very unique and the authorities have provided complete support. Hence we are not facing any major challenges or issues."

Challenges in waste management

One of the top challenges is the lack of awareness, says Imdaad's COO. "A genuine recycling culture has yet to take root in the UAE and other GCC countries, and there lies the core problem." For waste management programmes to become truly sustainable, he says community involvement is a must and individual members of society should be encouraged to actively participate and contribute to waste management.

"To date, many are not even aware that FM is linked to waste management. Having started our business in Jebel Ali, which was considered a remote area back in those days, we had started combining waste management with FM quite early in order to address our immediate needs. Over the years, we have built on our strengths and the combined capabilities of FM and waste management have helped us to grow to our current position," he adds.

Another challenge for businesses operating in this field is the high cost of running an effective waste management system and as a result not all FM companies have waste management facilities or capabilities. At Imdaad, they



consider environmental protection as a top priority and they are constantly working with governments and other entities to ensure they take care of their land, says Rasheed.

For Iftikhar Hamdani, General Manager of Ramada Hotel and Suites Ajman the main challenge was to educate staff and guests and to involve them in the first stage. The second challenge was segregation of the all types of waste - organic, non-organic, reusable, recyclable material, etc. "We had conducted extensive training programmes to educate staff and to make it more interesting by speaking at our monthly staff celebrations and we have successfully achieved this. The good thing is we have a high staff retention rate and our staff turnover is just 2%. So we don't have to worry about training new people often. With regard to the guests, we start the process from the check-in of the guests and keep green materials visible, highlighting the importance of waste reduction at the individual level. We have a segregation room where dedicated staff undertake this job on a daily basis to increase the recovery of recyclables and to use organic waste in our in-house compost machine."

In Jeetendra's view, the adoption of new technology remains a major challenge in this region. As facilities get more and more advanced both in terms of size and complexity, the waste management challenges also get complex, he states. "The ideal way to face these challenges is to be open to new technology and their active implementation. It has always been our intention to educate customers to make prudent choices in terms of the products they choose so they can avoid being penny wise and pound foolish."



Iftikhar Hamdani, General Manager of Ramada Hotel and Suites Ajman

"All the waste goes to zero landfill room where dedicated staff segregate it twice a day. All the recyclables are sold which benefit our bottom line; and the organic waste goes to the Compost machine for the production of compost."

Iftikhar Hamdani



Harvesting at Urban Farm, Ramada Hotel

Best practices

Touching upon the best practices adopted in managing the waste generated at Ramada hotel, Hamdani says they know exactly how much waste they produce – an average of 1000 KG on a daily basis. "To handle this waste, we do not have to miss any waste in our hotel, which is the advantage of our clean operations. All the waste goes to the zero landfill room where dedicated staff segregate it twice a day. All the recyclables are sold which benefit our bottom line; the organic waste goes to Compost machine where in 24 hours we produce compost from it at 120C, and 90% of the total waste is diverted from the landfill through this operation."

All the food that is left over from the restaurant or banquet goes to the compost machine directly and they produce refined compost for their Urban Farm and other green areas in the hotel as it is the best fertilizer for the plants opines the GM. The remaining compost is sold on a weekly basis.

"We are engaged in learning more techniques, and currently our focus is to involve 300 trained staff to work together on these initiatives. I do believe in investing in people rather than on machines and they really make a difference by practical involvement during the operations. We are a pioneer in the Middle East in waste management, and we are fully focused on energy and water conservation measures. Ramada Ajman is engaged in bringing about awareness among the children in the northern emirates, our recent campaign along with Ministry of Education gained the attention of 100.000 families with the 'Go Green' Painting competition in the northern emirates. We will continue working on this project in future to include Dubai and Abu Dhabi as well," says Hamdani.

Rasheed opines that there is a great need for increasing awareness among people about waste management and the benefits of FM, which requires concerted effort from public, private and government sectors. "Awareness is important for implementing source segregation as it requires active participation from the society. In 2009, Imdaad launched Be'ati, our flagship CSR initiative, which is committed to making children active partners in the environment protection campaign and as part of the initiative, short films and competitions are being organised at schools across the country. Moreover, the company is intent on going the full cycle - Reduce, Reuse and Recycle. To meet this objective, the organisation is presently assessing the scope of constructing a recycling plant."

Imdaad adopts best practices that suits the community where the services are provided. They advocate two bin systems (normally black bin for general waste and green bin for mixed recyclables) for the waste collection system from villas as they help the residents to sort their recyclables and general waste.

"In terms of high rise buildings, we collect waste from the collection points (garbage rooms). The building must be equipped with different capacity garbage trolleys to collect the waste from different floors. Most of the high rise buildings are equipped with garbage chute system through which the waste is fed into the trolleys," the COO says.

Karia from Dulsco says they start with a waste audit for all major projects to help understand and define the scope clearly. Once they start the operations, they work on streamlining the waste flow and explore opportunities to divert recyclables from reaching landfill. "The most significant best practice introduced by Dulsco is "Recycle To Regain". This initiative involves designing end-to-end recycling programme including the design, providing right equipment, awareness training for housekeeping staff,

I am sure if the malls were to implement a facilitywide recycling effort, visitors would gladly be a part of it. In fact, such sustainability initiatives might drive loyalty among environment conscious customers."

Suvarna Jeetendra

environment managers and senior management. The key objective of this event is to increase awareness on the 'right' recycling practices and prevent recyclables from reaching the landfill."

Blue Stream Managing Director says one has to be realistic in trying to answer the question of best practices that need to be adopted "from the view point of the end users – not the malls but the people who walk into them; not the facility managers but the people who live and dwell in those facilities. I am sure if the malls were to implement a facility wide recycling effort, the visitors would gladly be a part of it. In fact, such sustainability initiatives might drive loyalty among environment conscious customers."

"Thinking out of the box with these efforts especially for civic amenities – both government and private, will serve them well especially in raising their stature among customers. Source segregation is of course the best way to go about it. Waste streams with mixed garbage really impact the efficiency of recycling. We would request all facilities to realistically assess their systems for waste management, but with a focus on how to make them more sustainable."

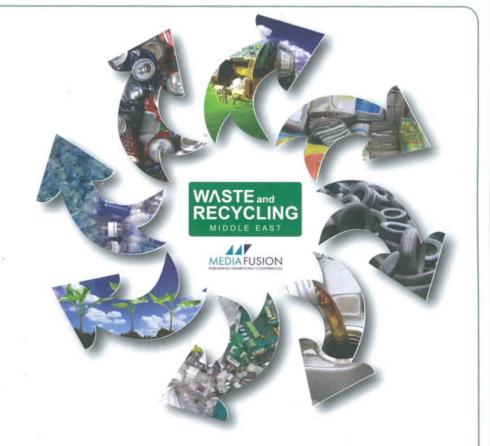
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