

Waste Management Action Plan

Introduction

The Ministry for Environment, Climate Change and Planning invited the Local Councils' Association, representing both Local and Regional Councils to study its proposals, identify opportunities, challenges, and propose solutions as it presents a consolidated consultation paper for a national long term waste management plan. The Regional and Local Councils are strategic and active stakeholders in this process.

The Local Councils' Association looks at this positive development from a local government perspective and how this transition may present opportunities to improve the residents' quality of lives in their localities. It hopes that its suggestions and recommendations are evaluated and selected for implementation.

These recommendations are the result of months of work and commitment of dedicated voluntary individuals and organisations committed to helping the Association and its members achieve its goals of providing a better quality of life to its residents in their localities.

Primarily, the Association focuses on two main areas of this paper as follows;

1. Regionalisation of Waste Collection

The Local Councils' Association favours regionalisation of waste collection by a delegation of authority from the Local Councils to Regional Councils to contract for, and administer, waste collections allowing for improvements both in procurement and in day-to-day coordination of collection services. It is against a total legislative devolution of the current responsibilities and authority of Local Councils.

2. Collection System

The Local Councils' Association regrettably notes that this long-term master plan does not foresee changes in the current sack-based collection system which renders footpaths inaccessible, dangerous, unpleasant, and unhygienic. The system is unsustainable, mainly because it hinders the councils' effort to promote walking as a sustainable mode of mobility and as it steps up its effort to ensure accessible localities for all.

Smarter and more efficient management of the ever-increasing waste material flows that accompany increasing density is necessary to achieve safer, more accessible, and greener public space, with more trees, better walkable footpaths and bike lanes.

Following a process of local consultations and successful pilot tests, the Association proposes a gradual shift from the current sack-based door-to-door collection to point collection system through a well-planned and easily accessible network of waste containers grouped according to the national separation strategy sized to the targeted volumes per type of waste. The collections' frequency depends on factors like the type of waste, the urban landscape, the type of containers used, the season and weather conditions.

The choice of containers should favour product that can successfully integrate in the urban environment, with refined aesthetics and allowing space for customisation. The products should be simple to use by people of all abilities, at a height that does not restrict visibility containing elements that ensure full accessibility for all. Materials and mechanical parts should be designed to reduce maintenance, facilitate service and cleaning. Containers must be specially designed to house technology elements such as remotely monitored volume and activity sensors and smart locks.

The waste container types vary according to the urban typologies such as urban cores, touristic zones, shopping and business districts, and residential areas' density. Styles can vary; side or rear-loading above-ground containers to underground containers.

Available technology related to access control and volume monitoring provides the administrator and all stakeholders with valuable data to facilitate planning, educational campaigns and better enforcement.

We are aware that these proposed modes of collection present us with significant space and infrastructural challenges to solve in addition to service and maintenance management. However, we are equally convinced that meeting these ambitious targets could be more accelerated with the active involvement of local councils, residents, and community stakeholders.

Vision and Ambition

Many cities worldwide have set Zero Waste goals to slow down the relentless transformation of natural resources into landfill waste. This draft consultation paper sets its plans to the minimum targets set by the European Union until 2030.

The Local Councils Association believes that our country's plans should be bolder. Malta needs to reverse its low waste management achievements today and place itself amongst the best performing countries in the European Union.

The Local Councils must be at the forefront to encourage its local communities in changing their lifestyles and perception in ways that facilitate that discarded materials become resources for others to use.

Our nation cannot achieve this visionary and ambitious goal by merely changing waste management practices and responsibilities to effectively and efficiently collect disposed materials. Achieving resilience for our localities and our nation requires planning, coordination and collaboration between the national government, government agencies and local government. More importantly, it needs the support and cooperation of all residents and community groups throughout Malta and Gozo.

Development plans and programs such as a national long term waste management plan, designed and pushed from the top alone, cannot address sustainable development complexity. Through their Local Councils, the public, non-governmental organisations and the business community have a significant and essential role to play, especially at the local level.

In the last twenty-six years, the central government has transferred various responsibilities to the local government as part of the development process to raise awareness, improve communication, and facilitate coordination and implementation.

However, this political recognition has not always been accompanied by an adequate level of autonomy, investment in the development of professional capacities and financial resources, leading to disappointing results for both the general public and governments themselves. Sometimes, this situation is used to take back specific responsibilities given to local councils initially towards the central government. It may seem to be the case in this proposal.

In recent years, Local Councils have been experiencing a more significant evolution in the expectation of residents. Although residents are aware of their Council's legislative, financial, and administrative constraints, they still expect their Council to express its position on matters of a local and territorial nature that could potentially harm the quality of their lives. Residents also expect that their opinion, especially on local issues, is represented and communicated by their local councils to higher authorities.

The published draft consultation paper seems to be proposing a complete legislative devolution of the current municipal waste collection responsibilities from the Local Council to the Regional Councils. The Local Councils' Association favours regionalisation of waste collection by a delegation of authority from the Local Councils to Regional Councils to contract for, and administer, waste collections allowing for improvements both in procurement and in day-to-day coordination of collection services. The legislative devolution of responsibility from Local Councils to Regional Councils will be a mistake. Our Local Councils' ambition is not only to maintain adequate and efficient communication with their residents also with regards to waste collection management but to be able to encourage planning and guide the design process to systematically reduce and eventually eliminate the volume of burnt or buried waste and conserve and recover all disposed material.

Zero Waste programs worldwide proved that local governments and local communities' active involvement is the fastest and most cost-effective way for governments to promote sustainability, reduce environmental impacts, protect the health, and create green jobs.

Sustainability from a local perspective

In October 2019, the LCA presented resident First. A shared vision that encapsulates the Local Councils' aspirations, priorities, and commitments for long-term sustainable

economic growth by working towards healthy, attractive, and vibrant localities will allow our current and future generations to want to live, work, and relax in.

The urban environment is essential to us, not least because Malta is the 7th most densely populated worldwide. With a direct influence on our lives and an impact in the broader environment, our localities need to be sustainable. Local Councils understands the role that our localities play in residents' lives and is committed to acting in this area. Together with the central government, Councils have a shared obligation to offer the kind of quality of life and opportunity that makes people want to live and work in them and make businesses want to invest.

Urbanised areas are the main drivers of our economic development while delivering essential services such as education, healthcare, and mobility; they are also associated with environmental degradation, congestion, crime, pollution, and economic and social exclusion.

Making sure that urban-related policies and regulations are coherent is a significant challenge. Governmental institutions may have diverse aims, often carried out independently and with conflicting effects. The Association role is to ensure effective coordination in all directions and at all levels.

The vision, 'Resident First', is a four-year project that focuses on Sustainable Mobility, Urban Green Environment, Open Urban Spaces and Smart Cities and how these pillars may improve our residents' lives in their respective localities. As part of the project, the LCA is preparing in-depth urban design research papers, which takes the form of best practice manuals for the planning, coordination, communication, and implementation of projects in line with the central vision.

Waste Collection Management and more importantly, its integration in our urban infrastructure features directly and indirectly in several comprehensive technical papers that the LCA will be publishing during 2021.

The Current Waste Collection System

Over the decades, our built environment's density increased whilst our sidewalks' space shrank to accommodate mostly additional on-street parking. Today, Malta is the most densely populated country in Europe with the least sidewalk space per



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household. The majority of our foot paths have a width of just about 1.2 meters. Our tourism-dependent economy, 2 million visitors a year, and our local business communities rely on the already heavily congested infrastructure, roads, and kerbside.

All goods and materials must enter and exit the building's public face and cross the public footpath. Door-to-door services collect waste from 240,000 households, every day of the week except Sundays. No solid containers are provided or used. All household waste collections are sack based, other than for glass. The system renders footpaths inaccessible, dangerous, unpleasant, and unhygienic.

Since the placing of discarded waste on pavements, while awaiting pickup, is considered to be temporary, our planners have traditionally excluded them from street design. But the temporary placement of today's waste, especially its volume, has a significant impact on the urban quality of life.

Besides the more prominent local impacts of discarding waste on pavements are the effects of truck collection on the island. The existing door-to-door collection maximises the number of truck stops, trips and kilometres. Trucks travel through every street on the island and stop in front of every building in every locality, idling and compacting, travel almost two million kilometres a year. With an average of 5 km/pg on their routes, compacting trucks burn hundreds of thousands of gallons of diesel fuel a year, releasing tons of greenhouse gases and other harmful emissions and causing significant levels of congestion. Collection trucks are also a substantial source of noise pollution.

Advantages

- Maximum Flexibility: Bags piles to fill the 'available' space.
- No capital investment required by the Local and National Government.
- No maintenance of containers, or the coordination of container return required after pickup in individual household containers.
- The system is convenient for residents, as it involves the least effort.



Disadvantages

- When placed along pavements, bags can be torn open by animals and other pests.
- Reduces, and in some instances blocks, sidewalk accessibility for the most disadvantaged and vulnerable and discourage walking.
- Fixed collection schedules are not aligned with residents and local businesses' time schedules and requirements, resulting in disposed waste left on the footpaths for more extended periods.
- Unsightly piles of bags impinge on our open space and often leave litter, liquids, and odours on the footpaths after collection.
- Piling bags on pavements and carrying and throwing them from the pavements to the truck are time-intensive and physically demanding; often a source of injuries such as strains and sprains.
- Bags are breakable, potentially dangerous to collect employees and passers-by when sharp or toxic materials are present.
- The most expensive and time-consuming system, causing other indirect negative impacts such as increased pollution, noise and air quality and traffic congestion.

Better Waste Collection Management through Urban Design

Tonnes of discarded materials pass through our residential, commercial, and public buildings, across our footpaths and into collection trucks, every day. The consultation paper does not address the current challenges related to our existing collection system in our localities.

Better planned through design, more effective, and more coordinated waste management is necessary for the nation's effort to meet its climate goals.

However, achieving good waste management is not just about the timely and coordinated disposal of our generated waste, nor just dealing with the direct emissions of greenhouse gases from the waste itself. We reach our country's sustainability goals only if we acknowledge the integral potential waste management must improve a wide range of quality-of-life related issues, including cleanliness, public safety, environmental, sustainable mobility and economic issues.

Our proposed solution looks at municipal waste collection systems from an urban design context. Better collection design could improve accessibility for all, achieve a higher quality of cleanliness and more aesthetically pleasing urban environment, less traffic-congested local roads, free of dangerous emissions and smarter waste collection management.

In line with its overall vision for greater sustainability, the Association has commissioned in-depth studies on how communities can manage material flows through a distributed network of frequent public collection hubs to reduce impacts and increase our localities' resiliency.

Besides assuming an active role to alter the patterns of consumption, discard use and disposal, the Local Councils are proposing a gradual shift from a sack based door to door collection system to a collection point system consisting of on a local consultation process with its residents and its local communities to draw up a network of approximately 13,000 collection points, serving 250,000 households with the average collection point for an average of 19 homes located within a range of not more than the 100-meter distance from any household. Individual Local Councils can adopt a standardised approach, tailored according to local solutions, that incorporate the efficient containment and transfer of waste within a broader planning view, street design and community development.

A phased implementation process would prioritise the most densely populated residential, tourists and commercial areas.

The following are the proposed system's advantages;

1. Collection schedules are often impractical for shift workers, short term rental apartments and local businesses. The system will facilitate the disposal of waste at the residents' convenience.
2. Cleaner and more accessible footpaths are promoting walkability, safety and hygiene.
3. Controlled accessibility to collection points improves the sense of ownership and increased recycling effort. Controlled access and volume monitoring technology would facilitate enforcement.
4. Better scalability in case of periodical and seasonal increase of waste.

5. A decrease of congestion on local roads caused by door-to-door collection systems. Trucks could collect less frequently with the adequate storage space and regionalised volume-reducing equipment.
6. A possible reduction in collection costs with a potential payback of CAPEX.

Moving Forward

This proposal needs to be seen within the greater scheme of things that are yet to come. The Local Councils Association will be publishing its Walkability paper as part of its Resident First vision - an urban street design guide that seeks to promote walking as a primary source of mobility for short distance commuting.

The design guide will encourage wider and safer pavements to ensure accessibility for all. It will provide guidance on urban street trees and lighting to make walking more pleasant and comfortable. It will establish cycling routes and pedestrian passages under its Slow Streets program which will connect the necessary services offered by the locality and promote the local business through better managed commercial areas. It will allow for the provision of street furniture elements, including waste containers forming part of the waste collection points of this proposal.

Finally, through extensive consultation with central government and local communities, it will publish its parking management strategy to introduce efficient on street management of our urban cores, propose a network of small but well connected off street car parking networks with charging facilities and propose a national strategy for parking provision to the central government with the aim of creating more open space for all residents in all localities.

The Local Councils' Association will also submit its proposals as regards to the drafting of the public call, to the DLG.

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