

██████████
Manager II (Implementation)
Ministry for the Environment, Climate Change and Planning

8th June 2021

Dear ██████████

Malta's Long Term Waste Management Plan 2021-2030 (December 2020): SEA Environmental Report
Consultation in terms of Regulation 7 of the Strategic Environmental Assessment Regulations (S.L.549.61)

Reference is made to the consultation of the Ministry for the Environment, Climate Change and Planning (MECP) on the Strategic Environmental Assessment (SEA) Environmental Report for Malta's Long Term Waste Management Plan 2021-2030, which was received by ERA on 14th May 2021.

I am enclosing ERA's comments and recommendations on the SEA Environmental Report, with the intention of ensuring that the implementation of this plan avoids or mitigates environmental impacts on the natural environment.

Yours sincerely,



Perit Michelle Piccinino
Chief Executive Officer
Environment and Resources Authority

ERA's comments on the Strategic Environmental Assessment (SEA) Environmental Report for Malta's Long Term Waste Management Plan 2021-2030 (December 2020)

3rd June 2021

1. Introduction

- 1.1 ERA welcomes the opportunity to comment on the Strategic Environmental Assessment (SEA) Environmental Report (ER) for Malta's Long Term Waste Management Plan 2021-2030.
- 1.2 The plan includes various proposals to bridge the gap between Malta's current performance and the 2030 targets for waste. It also seeks to promote waste prevention as a key priority area towards resource efficiency, together with reforming the waste collection and improving the management of waste through resource optimisation.
- 1.3 The following comments are provided without prejudice to ERA's review and additional comments on any eventual projects that may emerge from the plan, when more detailed environmental assessment and/or permitting will be required. Depending on their nature, scale and context, proposed projects may also require different types of environmental assessments or other related screenings including Environmental Impact Assessment (EIA) and/or project-level Appropriate Assessment, as relevant. These project-level mechanisms are important to ensure that any site-specific adverse impacts on the water environment, biodiversity, the landscape, etc., resulting from the installation of such waste management facilities are significantly avoided at an early stage.
- 1.4 ERA's comments on Section 5.0 in relation to Environmental Baseline are being included in Appendix 1.

2. Strategic issues

Waste management facilities

- 2.1 Various proposals in the plan require provision of additional waste management infrastructure and development. These large-scale facilities could result in significant take-up of undeveloped land, soil sealing, impacts on the landscape, air pollution, and generation of effluents. The impact of such additional facilities on land take-up has been duly acknowledged in the ER. These infrastructural/development projects include: (i) a Material Recovery Facility; (ii) an Organic processing Plant; (iii) a Waste-to-Energy facility; and (v) other infrastructure required to support waste management operations. The WMP makes reference to other smaller-scale waste management facilities which could also result in further take-up of land. These facilities or installations include a repair and reuse centre, a centralised WEEE collection point, temporary waste storage depots, and beverage containers. The WMP also proposes an increase in the remaining landfill void space through the adoption of specialised engineering techniques.
- 2.2 The ER highlights that adverse impacts associated with the development of large-scale waste management facilities could be mitigated by limiting their development to brownfield land and/or industrial sites, particularly favouring the use of land within the ECOHIVE Complex and Hal Far in order to reduce further land take-up. ERA agrees with this approach. Such proposals may also require further environmental screening, including the possible requirement for an

Environmental Impact Assessment (EIA) and/or project-level Appropriate Assessment (AA) as relevant, when more detailed information is provided.

- 2.3 However, the ER does not provide site-specific details on the other proposed smaller-scale waste management facilities. ERA considers that the choice of the location for such facilities is crucial to ensure that natural areas, the rural landscape, cultural heritage sites, and their context, as well as other sensitive receptors in their proximity (e.g. residential areas), are not significantly impacted. Therefore, it is suggested that such facilities are to be sited in designated or suitable committed sites, such as industrial areas or similar, ideally located close to strategic road networks, which have the required ancillary infrastructure already in place, and away from sensitive environmental areas. The latter also include water resources such as watercourses, valleys and the coast. This is also important to ensure that waste-related transport trips to and from waste-management facilities and consequential adverse impacts on the environment from road widening, site modifications, etc., are significantly reduced at source through holistic planning that also addresses the wider environmental implications of the operational phase. It is recommended that these environmental considerations are taken into account when selecting locations for these smaller-scale facilities. Moreover, the adopted specialised engineering techniques should ensure that the increase in landfill void space does not result in the encroachment of landfilling activities and other ancillary interventions onto adjacent undeveloped land.

Construction and demolition waste

- 2.4 The construction industry is responsible for around 80% of the total waste generation in Malta each year. According to the draft WMP, "this makes C&D waste the largest waste stream generated in Malta by weight". It also highlights that:

"intensive development and the subsequent large volumes of waste arising from excavations and C&D activities, coupled with the high reliance on backfilling of inert waste, is causing a significant problem vis-à-vis the lack of void space available on the Islands. The current situation indicates that in the coming years the volume of authorised void space might not meet the increasing demand for the backfilling of C&D waste."

However, the ER does not expand further on the impacts resulting from the lack of a clear policy intended to minimise the generation of C&D waste at source. The C&D waste measures proposed by the WMP, regarding the mandatory use of 15% of recycled materials in buildings (WP_L9) and the uptake of recycled materials and greener construction practices (WP_EA7) are positive initiatives which are intended to facilitate the reuse and recovery of this type of waste. However, it is suggested that C&D waste could be reduced further at source by:

- restricting activities and development involving excessive ground excavation works, including clear recommendations for the revision of sectoral and planning policies that encourage such excavations (e.g. planning policies favouring unlimited basement development and developments involving excavations or extensive site-engineering in geotechnical unfavoured areas where there is a greater likelihood that such waste is unsuitable for re-use);
- revisiting the drive toward intensive underground tunnelling, and/or substitution with lower-impact alternative technologies (e.g. micro-tunnelling, ground-level ducting) where appropriate, awarding greater attention to the curbing of excavation waste generation;

- promoting/requiring the use of soft landscaping in preference to hard landscaping where reasonably feasible (e.g. in traffic islands, urban recreational areas, etc.) and encouraging the controlled re-use of clean C&D waste as sub-soil/regolith; and
- encouraging and promoting the reuse and conversion of existing buildings as much as possible, as opposed to demolition and redevelopment.

Appropriate Assessment

2.5 The large-scale infrastructure mentioned in the draft plan is planned to be accommodated in an area designated for waste management facilities at the Maghtab ECOHIVE Complex, in order to facilitate synergy between operations. The details of most of these proposals are currently not available, whilst others are available and are being assessed by ERA at project-level in view of their potential environmental impacts. Moreover, the draft plan does not provide any details of the other proposed smaller-scale waste management facilities. Given that these proposals are currently too vague and non-committal, in terms of numbers, scale and site-specific location, it is not possible to determine whether these emerging projects could have a significant impact on any Special Areas of Conservation (SACs) and/or Special Protected Areas (SPAs). In line with the precautionary approach, the design of these projects should consider potential impacts on the natural environment and should be located away from sensitive environmental areas in the first instance.

2.6 In view of this, ERA concurs with the conclusion of the ER, which highlight that:
“Any proposed waste infrastructure will be vetted to determine if an EIA (Environmental Impact Assessment) or an AA (Appropriate Assessment) is required particularly if the project is considered to impose a number of significant adverse impacts on Special Areas of Conservations (SACs) and/or Special Protected Areas (SPAs). These studies may be necessary for new infrastructure proposed at the ECOHIVE Complex in Maghtab due to a number of SACs and SPAs in its vicinity, but similar requests for other sites in the Maltese Islands cannot be excluded at this stage”.

3. Detailed comments

3.1 Other detailed comments on the ER are highlighted below:

Section 7.0 Impact Assessment

Section 7.1.1 Air Quality

- Certain proposals involving additional waste management facilities (e.g. temporary waste storage depots (MC_WMF8)) or practices (e.g. increased collection times (WMRO_CW2)) could increase vehicular trips than the current baseline, therefore could increase air emissions from road transport. It is unclear how measure WP_EI1 for a repair and reuse centre is marked as beneficial, whilst measure MC_EPR1 for a centralised WEEE collection point is marked as having no effect on national air quality, considering that such measures may also increase vehicular traffic to and from waste management sites.

Section 7.1.2 Biodiversity

- The ER highlights that *Threats to biodiversity generally include land take-up which cause direct loss of species and habitats and indirect impacts such as trampling,*

settlement of dust on habitats and dispersion of pollutants via land, water and air. It is recommended that this paragraph be revised to include transportation and service corridors as another threat to flora and fauna, as per the 2018 SoER.

- With respect to increasing the remaining landfill void space through the adoption of specialised engineering techniques (WMRO_I4), the ER needs to consider the deposition of atmospheric pollutants from waste-related air emissions, and the potential contamination of soil and surface water runoff from waste management sites. Risks of accidental spillages, leakages and spill over effects are also to be taken into account.

Section 7.1.3 Soil

- The ER should make a cross-reference to the objectives and measures of the 2nd Water Catchment Management Plan in view of possible linkages between land contamination and water pollution (e.g. from waste batteries and accumulators (WMRO_EPR17) and waste oils (WMRO_EPR25)).
- The repair and reuse centre (WP_EI1) as well as the establishment of beverage containers (WMRO_EPR10) may lead to soil loss through the uptake of land with possible indirect effects on landscape and biodiversity, unless these facilities are clearly directed to existing urban and committed areas. This needs to be acknowledged in the ER.

Section 7.1.4 Climate Change

- Certain proposals in the draft WMP involving waste management facilities (e.g. increasing the remaining landfill void space and the Waste-to-Energy plant) (i.e. WMRO_I4, WMRO_I6, MC_EPR1) or practices (e.g. increasing collection time and shipment of waste) (i.e. WMRO_CW2, WP_L10) could increase atmospheric pollutants and/or contribute to climate change. These should also be taken into account.

Section 7.1.7 Water

- The design of new waste management facilities should consider the objectives of the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD) in relation to the linkages between water and ecosystems. Furthermore, the closure and decommissioning of existing waste management facilities (whether private or otherwise) should be carried out in accordance with the relevant national legislation so that it ensures the protection of land and groundwater resources.
- No reference was made to the potential adverse impact of increasing the remaining landfill void space (WMRO_I4) on the marine environment, associated with the release of leachates during decomposition of waste.

Section 7.1.8 Human health

- The proposal to increase remaining landfill void space (WMRO_I4) needs to take into account the additional release of atmospheric pollutants associated with the decomposition of waste.

Section 7.1.9 Landscape

- The ER recognizes that some measures proposed in the draft plan may result in additional take-up of undeveloped land and adverse visual impact on the landscape (such as temporary waste storage depots (MC_WMF8) and a centralised WEEE collection point (MC_EPR1)). It is suggested that the same impacts are also highlighted as possible for the proposed repair and reuse centre (WP_E1) and the establishment of beverage containers (WMRO_EPR10).
- The ER also highlights that increased heights due to steeper sloping of the current landfill mass is expected to have consequential visual impacts on the landscape with respect to increasing remaining landfill void space (WMRO_I4). Therefore, it is unclear how such measure is marked as having no effect on the landscape in Table 30.

Section 7.1.10 Transportation and Infrastructure

- Most of the proposals in the plan could increase transportation of waste material to and from waste management facilities as well as infrastructure (e.g. a repair and reuse centre, beverage containers, separate collection of waste batteries and accumulators and increased weekend collection) (i.e. WP_EI1, WMRO_EPR10, WMRO_EPR17 and WMRO_CW2). Such impacts should be taken into consideration in Table 31.
- The decommissioning of substandard waste carrier vehicles may lead to an increase in the generation of end-of-life vehicles to be disposed of in a determined number of Authorised Treatment Facilities (ATF). The ER should recognise/address this and direct such ELVs towards authorised facilities.

Section 7.1.11 Waste and Resources Management

- The ER highlights that the waste facilities will be adversely affected by the proposals for the separate collection of new waste streams, including the separate collection of organic waste from commercial entities (WMRO_CW4) and of paper from households (WC_4), since such measures will increase the tonnage of waste bags received at waste management facilities. This is in turn problematic since such waste bags produce small plastic fragments that contaminate the other good-quality recyclable waste fraction. Therefore, it is unclear why measure WC_4 is marked as beneficial in Table 32. Moreover, the same issue needs to be taken into account with respect to the separate collection of waste batteries and accumulators.
- The use of specialised engineering techniques to optimise the landfill void space (i.e. measure WMRO_I4) may lead to the generation of additional/modified leachate and landfill gases profile, which may require the development of appropriate containment and treatment infrastructure/facilities.
- The establishment of a repair and reuse centre (WP_EI1) may create a legal lacuna with respect to environmental permitting, since it would be difficult to determine when a product or its constituent components has turned into waste or not, with subsequent issues related to the duty of care principle. It is recommended that such centres be assisted with trained personnel in order to assess whether the item/product can be reused/recycled or not, therefore, considered as waste.

4. Mitigation Measures and Recommendations

- 4.1 The ER highlights various mitigation measures and recommendations for improvement, including:

- Limiting the development of large-scale waste management facilities to degraded or brownfield land and/or industrial sites, giving preference to dilapidated sites through the site-selection exercise, and favouring the use of land within the ECOHIVE Complex and Hal Far;
 - The inclusion of site-specific containment measures and monitoring of permit conditions;
 - To propose initiatives that establish markets for secondary materials;
 - The introduction of new types of waste collection systems, such as the collection of paper and cardboard waste in cardboard boxes or paper bags to reduce the consumption of single use waste bags;
 - Increasing the number of bring-in-sites or public recycling bins;
 - A waste characterisation exercise for comprehending the types and quantities of batteries and accumulators being disposed of;
 - Effective reduction in the generation of waste and increasing the quality of source-separated waste; and
 - Assimilation of initiatives into the WMP led by non-government projects spearheaded by the private sector, non-profit organisations and the public that seek to participate in Malta's waste management activities.
- 4.2 ERA agrees with the mitigation measures and recommendations highlighted above, since they will mitigate the adverse environmental impacts identified in the SEA study. It is being emphasised that new infrastructure and facilities should be directed towards committed sites as a first preference, in order to limit the cumulative impacts of such developments in terms of land take-up and adverse impacts onto the landscape, biodiversity and water resources. This measure should also apply to the proposed smaller-scale waste management facilities and other similar interventions. Furthermore, the ER needs to be revised to clarify that the use of land at Hal Far for these large-scale waste management facilities, refers to the Hal Far Industrial Area.
- 4.3 Whilst it is acknowledged that increasing the number of bring-in-sites or public recycling bins may shift away from kerbside collection and reduce travelled distance of waste collection trucks, ERA considers that increasing such services will create an additional demand for a dedicated land for this particular use, which depending on their location, could have consequential adverse impacts on the environment. Furthermore, such sites would require proper site selection as well as due attention to practical preventive and mitigatory measures such as:
- effective site containment;
 - frequent emptying of bins in order to avoid overflowing and to avoid deterring prospective users as a result of the unhygienic state of the facility;
 - measures to limit accidental dispersal of waste (e.g. jablo, plastic, paper) into valleys, the sea etc., via water runoff, stormy seas and wind; and
 - provision of proper flooring (as opposed to spalling tarmac) to facilitate site clean-up and collection of spilt waste, as well as to minimise inconvenience to users (which may be yet another subtle factor deterring increased use of such waste separation facilities).

The recommendation in the ER should be revised to include suitable safeguards as highlighted above.

5. Alternatives

- 5.1 The ER concluded that Alternative 1 (i.e. full implementation of the WMP measures as proposed), has the most beneficial environmental impacts, whilst Alternative 2 (i.e. voluntary measures not implemented) has led to a marginal decrease in the beneficial impacts arising from waste prevention. Essentially, both options significantly rely on further infrastructural investment to deal with Malta's waste streams, focusing on reuse, recycle and recovery, which are likely to give rise to other environmental concerns, such as land take-up.
- 5.2 The alternatives assessed represents almost the same options for the managing of waste. ERA considers that other alternative options should have been taken into account, such as a scenario where the proposed small-scale waste management facilities are implemented through centralised large-scale facilities, possibly at Maghtab or industrial areas in order to minimise adverse impacts on the environment, particularly the landscape, biodiversity and soil.

6. Monitoring requirements

- 6.1 Generally, ERA concurs with the proposed mitigation measures, design criteria and monitoring requirement, as outlined in the report. These measures address some of ERA's concerns regarding the prevention of adverse environmental impacts. The monitoring programme in the ER needs to take into consideration the following additional comments:
- In relation to air quality, the ER highlights that *"several parameters are regularly monitored from IPPC licensed facilities and reported to ERA on an annual basis through the relevant permitting processes"*. In fact, a timely submission of the application will ensure that the applicable Best Available Technology (BAT) are considered at the design stage, so as to avoid future environmental problems requiring retrofitting or other remediation measures.
 - The section on water could include that coastal and marine water quality values are to satisfy the objectives of the Marine Strategy Framework Directive (MSFD).
 - Section 10.10 of the monitoring programme needs to include the monitoring parameters for infrastructure, for instance the total footprint required for new waste infrastructure.

Appendix 1

Environmental baseline

The following comments are presented according to the order of the respective sections in the consultant's SEA Environmental Report.

Section 4.2 National Waste Legislation

- Table 4 of the National Waste Legislation is to be revised to include the Industrial Emissions Framework Regulations (SL 549.76) and the Industrial Emissions IPPC Regulations (SL 549.77), which regulate major waste management installations in Malta.

Section 4.4 Environmental Policies

- Reference to the Industrial Emissions Directive and the Landfill Directive is to be made with the current list of European Directives.

Section 5.1.7 Emission ceilings

- Table 7 regarding 'National emissions and their emission ceilings', needs to be updated as follows:

	Pollutant				
	NO _x	NM VOC	SO ₂	NH ₃	PM _{2.5}
2019 emissions (tonnes)	5301	2258	160	1336	371
2020 emissions ceiling (tonnes)	5565	1766	2784	1797	542
2030 emissions ceiling (tonnes)	2015	1675	605	1422	361

Section 5.2.1.1 International Designations

- Last paragraph of this section highlights that "development proposals need to take into account the potential effects on protected species and habitats" and that "these are achieved through requests for ecological assessments (ex: depending on the statutory designation, a site-specific Appropriate Assessment could be requested) during the planning phase". In this regard, this paragraph should also make reference to the Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44)¹, since it contains the legal basis of the aforementioned ecological assessments.

Section 5.2.3 Conservation Status

- Reference should be made to the latest available data submitted as part of the Habitats Directive Article 17 Implementation Report in 2019, due to considerable changes in the conservation status of habitats and species. Various useful sources include:

¹ <https://legislation.mt/eli/sl/549.44/eng/pdf>

- Malta 6th National report to the Convention on Biological Diversity², with particular reference to information on habitats under Target 5³ and on species under Target 11⁴;
- Report on progress and implementation (Article 17, Habitats Directive)⁵.

Section 5.3 Soil

- In order to provide a comprehensive overview of the national framework for the protection of soil in the Maltese Islands, ERA suggests the following rewording:

‘Through Malta’s National Biodiversity Strategy and Action Plan (NBSAP), national targets have been set to conserve soil and minimise soil loss and erosion, including the requirement to develop a Soil Action Plan for the Maltese islands. Several national action plans including the Soil Action Plan, the National Action Plan on Desertification and Land Degradation in the Maltese Islands, and the Geology, Geomorphology, Soil and Landscapes Strategic Action Plan are currently in preparation and should enter into force in the near future to improve soil protection and conservation. In addition, the main pieces of national legislation that protects soils are the Environment Protection Act (Cap. 549), Fertile Soils Preservation Act (Cap. 236) and the Preservation of Fertile Soil Regulations (S.L. 236.02).’

- ERA recommends that the Maltese Soil Information System (MALSIS) classification should be used instead of the Lang classification, as the former represents a more recent survey of the soils found in the Maltese Islands.

Section 5.7 Water

- ERA suggests that the ER uses the latest information on the main pressures/sources available in the MSFD Initial Assessment Report, which was published in 2020, instead of the 2018 SoER report.

Section 5.10.4 Land Take Up from Waste Management Facilities

- The report highlights that “There is currently no data available regarding the footprint that each of the individual or collective facilities occupy”. The site plan for each permitted waste management facility is available on ERA’s website and on ERA’s MEPS server.

² <https://chm.cbd.int/database/record?documentID=252696>

³ “The rate of loss of natural and semi-natural habitats of conservation value is at least halved, and degradation and fragmentation is significantly reduced. The percentage cover of “forests and semi-natural areas” has not decreased below the CORINE land cover data of 2006”.

⁴ “The risk of local extirpation of known threatened species has been reduced, with 30% of the species of European Community Importance in the Maltese territory having a favourable or improved conservation status”.

⁵ https://cdr.eionet.europa.eu/mt/eu/art17/envxngv_g/

