



# LOCAL SOLID WASTE MANAGEMENT PLAN

MUNICIPAL SPATIAL PLANNING SUPPORT PROGRAMME IN KOSOVO



MUNICIPALITY OF  
HANI I ELEZIT/ELEZ HAN

Implemented by:

**UN HABITAT**  
FOR A BETTER URBAN FUTURE

Financed by:

**SWEDISH DEVELOPMENT  
COOPERATION**



The Case of Municipality of Hani i Elezit/ElezHan

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July 2014

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## Abbreviations

C&D waste	Construction and demolition waste
EIA	Environmental Impact Assessment
HiE	Hani i Elezit / Elez Han
LEAP	Local Environmental Action Plan
LSWMP	Local Solid Waste Management Plan
MA	Municipal Assembly
MESP	Ministry of Environmental and Spatial Planning
MSW	Municipal Solid Waste
MSWM	Municipal Solid Waste Management
MuSPP	Municipal Spatial Planning Support Programme
NGO	Non-Governmental Organisation
SEA	Strategic Environmental Assessment
SIDA	Swedish International Development Agency
ToR	Terms of Reference
KAS	Kosovo Agency of Statistics
KEPA	Kosovo Environmental Protection Agency
UN	United Nations
UNDP	United Nations Development Programme
UN-Habitat	United Nations Human Settlements Programme
WHO	World Health Organisation

# I. Introduction and Background

## 1.1 Current waste management situation

### 1.1.1 Hani i Elezit / Elez Han Municipality

Hani i Elezit / Elez Han is located in the south eastern part of Kosovo. It is bordered by the Kaçanik municipality in the north and the Republic of Macedonia in the west, east and south. It is further situated, between the Sharr Mountains in the west and Karadaku Mountains in the east, along the main road from Prishtina to Skopje in Macedonia. The territory of Hani i Elezit / Elez Han has an area of approximately 82.95km<sup>2</sup> or 8294.37.53ha (0.77% of territory of Kosovo).

The Municipality includes the town of Hani i Elezit / Elez Han and the ten settlements Krivenik, Gorance, Rezhance, Pustenik, Paldenice, Secishte, Dimce, Dremjak, Neqafc and Vertomice. The settlements are spread across both sides of the town and on both sides of the Lepenc River. The settlements are connected with the town by roads most of which are paved. Some roads are unpaved or gravelled.

#### Map 1.1.1 Location of Hani i Elezit / Elez Han within Kosovo



**Source: Municipal Development Plan of Hani i Elezit / Elez Han 2010-2025**

Hani i Elezit / Elez Han is located in a mountainous highland region that is characterized by herbal and ligneous vegetation, predominantly oak. The slopes exposed toward the south absorb more solar energy, creating a warmer climate and melting snow faster. These conditions are ideal for vegetative cultivation. In comparison, the northern side of the hills remain largely snow-capped until late spring.

In Hani i Elezit / Elez Han, the climate is warm and temperate. The average annual temperature is 11.6 °C. The warmest month of the year is August with an average temperature of 21.7 °C. In January, the average temperature is 0.2 °C. The average annual rainfall is 618 mm.

In 2011 Hani i Elezit / Elez Han had a population of 9,395 inhabitants which is predominately Kosovo Albanian. There are 35 Kosovo Bosnians living in Hani i Elezit / Elez Han. The population of the municipality is young with 30% of the population below the age of 15 and only 5% over the age of 65. Some 15% of the population is regarded as living in extreme poverty while around 37% can be regarded as poor (World Bank).

**Table 1.1.1 Distribution of the population per settlement**

Settlement	Population (2011)	Settlement	Population (2011)
Hani i Elezit / Elez Han (Town)	2,534	Neçavc	110
Dimçë	249	Paldenicë	1,723
Dramjak	121	Pustenik	615
Gorancë	1,028	Rezhancë	475
Krivenik	289	Seçishtë	2,251
Vërtomicë	0	Hani i Elezit / Elez Han (total)	9,395

**Source: Reports of census 2011 - KAS**

The Municipal Development Plan for Hani i Elezit / Elez Han includes a population forecast for the year 2025. Including those registered but not actually living in Hani i Elezit / Elez Han, a population of around 11,860 is anticipated. With 12% of the population living outside Kosovo, the number of permanent residents (so excluding the diaspora) will be around 10,440. Based on the census of 2011 and the forecast, the current (2014) number of permanent residents can be estimated to be around 9,600 inhabitants.

The industry in Hani i Elezit / Elez Han is well developed and well known not only in Kosovo but further abroad as well. The most important industrial company is the cement factory Sharrcem which employs just over 500 employees. Other main companies are Kosovaplast, which is a private company for styrofoam production, and Sharr Sallonit, a private company that used to produce asbestos cement articles but its premises are currently being used as Custom Terminal. The further business structure in Hani i Elezit / Elez Han is as follows:

- Trade 47 entities
- Hospitality (hotels, catering, cafe/bars, etc) 22 entities
- Manufacturing 4
- Transport 55 businesses with a total of over 100 different transport trucks
- Construction 5 entities
- Forwarding - Shipping 58 companies
- Services 21 entities
- Craftsman 7

In addition there are several informal, unregistered entrepreneurs such as electricians, construction companies, hair dressers, tailors etc.

The institutions within the municipality include:

- The Main Centre of Family Medicine (MCFM)
- The Municipal Offices
- The main primary school with satellite schools in four small villages
- Two village primary schools (in Paldenica and Gorance)
- The Police Station
- Post office

- Train station with custom post
- Fire-fighter station
- The Border Post

### 1.1.2 Waste amounts and composition

**Waste types and amounts** - There is no official record on the quantity and composition of the collected waste. However, in 2011, a waste sampling analysis was conducted and data on waste generation was collected. Based on the data, the daily waste generation per person in the municipality was estimated to be 0.25 kg/person. With 9,600 permanent inhabitants, the annual household waste generation can thus be estimated to be around 875 tonnes.

Municipal solid waste includes commercial waste in addition to household waste. As a rule of thumb, household waste makes up only 70% to 75% of the total of municipal solid waste. In addition to the approximately 850 tonnes of household waste, up to 375 tonnes of commercial waste can therefore be expected to be produced.

In addition to the data collected during the 2011 waste sampling and analysis, information on the waste amounts delivered for disposal to the transfer station in Ferizaj and to the disposal site in Gjilan is available. This information indicates that around 900 tonnes of waste per year is collected in Hani i Elezit / Elez Han. Although, waste collection services are provided to the majority of waste generators, waste collection services are not always reliable and some of the villages<sup>1</sup> do not receive waste collection services at all (refer to section 1.1.3). At best the 900 tonnes of waste collected on an annual basis represents some 75% of the waste generated. This would indicate an annual waste generation of 1200 tonnes.

For planning purposes, based on the above, for municipal solid waste a generation rate of between 1200 and 1300 tonnes per year will be assumed.

In addition to the household waste and commercial waste, construction and demolition waste is generated in Hani i Elezit / Elez Han. Reliable information is not available but observations at the filling site, where construction and demolition waste is used for raising the terrain as preparation for the realisation of a park, indicate that the generation rate could be several hundred tonnes per year. This amount excludes demolition waste generated by the cement factory.

Although in Hani i Elezit / Elez Han there are several industrial companies, industrial waste is practically not generated. Both the cement company and the company producing Styrofoam reuse practically all their waste in their own production processes. Moreover, the cement factory uses industrial waste from other waste generator as raw material for the cement production. As example the utilisation of ashes from the electricity generation sector can be mentioned. The cement factory does however generate waste comparable to household waste as well as waste from the demolition of old factory buildings. An overview of waste generation and utilisation by the cement factory is included as annex 3.

**Table 1.1.2 Waste amount generated**

Waste type	Waste amount generated (estimate)
Household waste	875 tonnes/year
Commercial waste	375 tonnes/year
Construction and demolition waste	200 to 500 tonnes/year
Industrial waste (Sharrcem waste)	1,650 tonnes in 2013 (incl. 885 tonnes demolition waste, 308 tonnes of metals from demolitions and 330 tonnes refractory bricks to be reused in cement production)

<sup>1</sup> Waste collection services are not available in Dimce, Gorance, Krivenik and Rezhance, villages with respectively 30, 160, 40 and 30 households.



**Source: Previous Solid Waste Management Plan of HiE and municipal sources**

**Waste composition** - The composition of household waste has been determined in detail during the elaboration of the Plan for Sustainable Waste Management in the Municipality of Hani i Elezit / Elez Han in 2011. The following table shows the waste composition in Hani i Elezit / Elez Han in categories as defined by the Ministry of Environment and Spatial Planning and compares the percentages to the figures for Kosovo reported in the “Current waste situation in Kosovo, 2008” published by Kosovo Environment Protection Agency.

**Table 1.1.3 Composition of household waste in Kosovo and Hani i Elezit / Elez Han**

Waste Fraction	Kosovo	Hani i Elezit / Elez Han
Organic (kitchen and garden waste)	35.3%	35.8%
Glass	21%	11.8%
Wood	11%	14.2%
Plastic	9.4%	9.4%
Metals	9.3%	11.1%
Textiles	8.2%	13.5%
Paper and cardboard	4.6%	4.1%
Hazardous household waste	1.2%	0.1%
	100%	100%

**Source: Previous Solid Waste Management Plan of HiE and KEPA's Current Waste Situation in Kosovo, 2008.**

As compared to household waste, commercial waste will contain higher percentages of packaging materials and thus higher percentages of paper and cardboard and plastics. In addition, the commercial waste contains waste (animal by-products) from the butchery.

The composition of construction and demolition waste has not been investigated. Observations at the filling site however indicate that the largest part of the waste is concrete and brick rubble. The different fractions that make up the waste generated by the industry (Sharrcem) are presented in annex 3.

**1.1.3 Waste management services and disposal methods**

Current waste management services are provided by the company “PASTERTIA”. The company is privately owned and contracted by the Municipality to provide the services. The company has 7 fulltime employees being a director, a driver and two crew members for the collection vehicle, a street sweeper, a fee collector and a stand-by person to assist wherever needed.

Waste collection services are provided to practically all waste generators in the Municipality. The city centre is serviced twice per week while the other residential areas are serviced once per week. The service is, in principle, carried out during four collection days. No waste is collected on Mondays, Fridays and Sundays. However, the only waste collection vehicle used for waste collection is old (manufactured in 2001) and no longer reliable. Steep mountainous roads can no longer be negotiated and several villages (Dimce, Gorance, Krivenik and Rezhance) can therefore no longer be serviced. Vehicle breakdowns mean that not all planned waste collections can be carried out. These reasons combined make that an estimated 25% or more of the waste generated cannot be collected.

Waste generators use wheeled waste containers for discarding their waste. All households have been provided with a 120 litre wheeled bin and businesses and institutions use 1,100 litre steel or plastic containers.

Collected waste is transported either to the transfer station in Ferizaj (20 km from Hani i Elezit / Elez Han) or directly to the disposal site in Gjilan which is just over 60 km away. Although further away, transportation to the disposal site is preferred since there smooth and immediate waste unloading is guaranteed while the transfer station is

often congested and overfilled. At both the transfer station and the disposal sites, waste loads including butcher waste are occasionally refused or accepted only against a higher disposal fee.

In addition to waste collection, the company provides street and park cleansing services and, on an as needed basis, provides repair services related to the water distribution and sewage networks.

Construction and demolition waste is managed by the waste generators themselves. With a truck or tractor trailer, the waste generators transport the construction and demolition waste to a filling site along the Lepenc River in the northern part of the municipality. There the waste is used to fill-in an erosion gully as preparation for the realisation of a leisure park along the river bank. Supervision of the filling site is very limited and occasionally waste other than construction and demolition waste is deposited as well. Moreover, due to lack of supervision the quality and acceptability of the construction and demolition waste is not verified.

The waste generated by the Sharrcem cement factory, which is not re-used within the production process or sold directly, is largely collected by a private waste company from Ferizaj. Mixed waste comparable to household waste is transported to the Gjilan waste disposal site while separate collected fractions are recycled. At the expense of Sharrcem, the company from Ferizaj also empties the public bins located outside the cement factory along the road leading to the border with Macedonia. As mentioned, large quantities of waste, such as refractory bricks, are kept on site of the cement factory in order to be used as raw material in the cement production process.

**Table 1.1.4 Current waste disposal methods**

Waste type	Amount (tonnes/year)	Disposal method
Household waste	660	Disposed of at landfill outside the municipality
Household waste	215	Dumped within the municipality
Commercial waste	280	Disposed of at landfill outside the municipality
Commercial waste	95	Dumped within the municipality
Construction waste	200 to 500	Dumped within the municipality
Industrial waste	1300	Disposed or sold outside the municipality
Industrial waste	330	Kept on site and used as raw material

*Source: Previous Solid Waste Management Plan of HiE and municipal sources*

#### 1.1.4 Waste Separation, Composting and Recycling

At the moment waste separation, composting or recycling is taking place in Hani i Elezit / Elez Han on a limited scale. In Ferizaj, there is a company dealing in recyclable materials but since it is regularly closing and opening again, it does not warrant the start-up of separate collection of recyclable fractions. However, as part of their ISO 14001 Environmental Management System, the Sharrcem cement factory has introduced waste segregation as source and collects recyclable fractions such as plastic and metals in dedicated waste containers.

Composting is practiced in the municipality on a modest scale. Some individuals living in the villages deposit the organic waste fraction in locations away from residential buildings together with some manure in order to let it decompose without much attention or handling. This results in the production of a compost product over an extended period of time (several months) which is then used in gardening or agriculture.

#### 1.1.5 Organisational and Financial Aspects of Current Waste Management

Waste management is the responsibility of the Municipality of Hani i Elezit / Elez Han. For the provision of the waste collection services, the Municipality has procured a waste collection vehicle and provided waste containers to all waste generators. For the operation of the vehicle and the actual waste collection itself, the municipality has engaged and contracted a private company. The company, "PASTERTIA", has also been tasked to collect the waste fees.

Current fees are:

- Households using a 120 litre bins: € 3,00 per month
- Business pay a fee varying between € 5.00 and € 15.00 per month
- Larger businesses using 1100 litre containers pay € 12 per container lift or approximately € 50 per month in case of weekly waste collection or € 100 per month in case of collection twice per week.

On basis of information provided by the company, the level of fees collected is estimated at 30%.

Payment by institutions is above 30%. Although the Municipality is the owner of the waste collection vehicle, the Municipality pays for waste collection from their offices. In addition, the municipality pays for the waste generated in the schools, the fire station and household type waste from the health centre<sup>2</sup>. The police, border control and customs do not pay for waste collection while the train station authorities do pay for themselves.

For the disposal of collected waste at either the transfer station or the disposal site, the waste collection company pays a disposal fee of € 6 per tonne.

## 1.2 Content and Development of the Waste Management Plan

This plan presents the objectives for waste management in Hani i Elezit / Elez Han Municipality as well as the measures to be taken to realise the objectives. The plan includes the funding of measures to be taken and the actors responsible for the implementation of the activities. Support measures and regulation and enforcement to increase the success of the activities are described.

The elaboration of a local waste management plan is a legal obligation for the municipalities in Kosovo which is set forth in Article 10 of the Law on Waste No. 04/L-060. During the development of this local waste management plan the Law, the Strategy of the Republic of Kosovo on Waste Management 2012-2021 and the Plan of the Republic of Kosovo on Waste Management 2013-2017 have been taken into account.

The Law on Strategic Environmental Assessment (Law on SEA; No. 03/L-230) has been taken into account as well. However, the elaboration of a SEA will not be required for this LSWMP. The plan does not include any project, facility or installation for which the elaboration of an Environmental Impact Assessment (EIA) would be required.

The current waste management plan for Hani i Elezit / Elez Han Municipality is based on the *PLAN FOR SUSTAINABLE WASTE MANAGEMENT IN THE MUNICIPALITY OF HANI I ELEZIT / ELEZ HAN* of 2011 elaborated by the working group (refer to annex 1) which at the time was assisted by the LOGOS programme financed by the Swiss Cooperation Office in Kosovo. The plan was partly implemented with the provision of waste containers to all waste generators in the municipality and the procurement of a waste collection vehicle as the major achievement. Other goals have not or only partly been reached. Revision and updating of the plan, together with harmonisation of the plan with the central policy and legal framework, was therefore required.

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<sup>2</sup> Hazardous healthcare waste, such as infectious waste and sharps, is collected by a National waste company specialised in the collection of this type of waste.

## II. Objectives

The overall goal of the Municipality of Hani i Elezit / Elez Han is to provide the inhabitants of the municipality with a clean and healthy environment which is free from waste and the negative impacts thereof. In order to meet this overall goal, the Municipality has formulated the following waste management objectives for the period till the year 2019.

**Improved service provision** - The Municipality wants to continue to improve the waste collection services and aims to expand service delivery from a current 70% coverage such that reliable waste collection services are provided to all waste generators in the municipality by the end of 2015.

**Promotion of Composting** - Since composting is currently practiced a very modest scale and in villages only, the Municipality does at this stage not want to formulate concrete, quantifiable goals for composting of the organic waste fraction. However, the Municipality does want to promote composting through demonstration pilots in the Town of Hani i Elezit / Elez Han in households with sufficiently large gardens.

**Introduction of Recycling** - The Municipality wants to introduce the separate collection of recyclable fractions on basis of a bring system. The objective is to establish an area where waste generators can bring their recyclable waste fractions and where the recyclable waste can accumulate till the stored recyclable waste is of a sufficient quantity to warrant transportation for sale outside the municipality.

**Clean-up of illegal disposal sites** - The Municipality wants to eliminate all illegal disposal sites by 2017.

**Utilisation of construction and demolition waste** - The Municipality wants to utilise construction and demolition waste as basis for beautification of the municipality.

**Street cleansing** - Street cleansing is of special concern to the Municipality. The Municipality aims to continuously improve the cleanliness of streets and public spaces.

### III. Improvement Measures

#### 3.1 Waste collection services

In order to expand the coverage of waste collection from the current 70% to practically 100% of all waste generators, the Municipality intends to increase the reliability of the waste collection equipment. The Municipality intends to procure a new or a good, reconditioned second hand waste collection vehicle which shall be managed by a municipal owned, public waste management company. In case the Municipality fails to secure the approval from the central government for the establishment of a public company, the waste collection vehicle shall be managed and waste collection services provided by a private company to be contracted.

The Municipality will retain the current waste collection vehicle which will serve as stand-by equipment to be put into service whenever the vehicle to be procured needs to be serviced or can for any other reason not be used.

With the waste collection vehicle to be procured, the capacity to provide weekly waste collection services will be secured and such services will thus be provided to all waste generators from 2015 onwards. The waste collection schedule will be determined by the Department of Public Service in consultation with the public or private waste management company. Tentatively, the following schedule is presented.

**Table 3.1.1 Tentative waste collection schedule in HiE**

Settlement	Collection day(s)	Settlement	Collection day
Hani i Elezit / Elez Han (Town)	Monday and Thursday	Neçavc	Monday
Dimçë	Monday	Paldenicë	Thursday
Dramjak	Monday	Pustenik	Monday
Gorancë	Monday	Rezhancë	Thursday
Krivenik	Monday	Seçishtë	Monday and Thursday
Vërtomicë	Monday		

With the vehicle to be procured, waste collection services can be provided to all waste generators with only two waste collection days per week. In order to increase the efficient use of the waste collection vehicle, the Municipality aims at expanding the services to waste generators currently serviced by a waste management company from outside the municipality including the Sharrcem cement factory.

#### 3.2 Promotion of composting

Treatment of the organic waste fraction will be promoted by the Municipality. The aim is that the current practices in the villages will be expanded to the Town of Hani i Elezit / Elez Han. In cooperation with the village heads in the Town of Hani i Elezit / Elez Han, individuals interested in taking up home composting will be identified and these individuals will be supported in setting up pilot home composting activities. For up to ten households the Municipality will provide the materials to construct compost bins as well as all the information required to start-up the composting process. If possible different type of composting bins will be realised and commercially available compost bins may be included in the activity. Participating individuals will be encouraged to meet regularly in order to exchange their experiences.

Persistent and successful participants in the composting scheme will reduce the amount of their waste that will have to be collected and the Municipality will therefore allow them a waste fee reduction of 25%.

In addition to the home composting, the Municipality intends to investigate the feasibility of a centralised system of composting. The company responsible for waste collection could also exploit a small scale, low-tech compost facility at a location in the municipality to be identified. If necessary the location could be prepared for the composting activity by utilising construction and demolition waste first (refer to section 3.5).

### 3.3 Introduction of recycling

Since the inhabitants of Hani i Elezit / Elez Han do not practise segregation of waste at their homes at the moment and since currently only 70% of all waste generators receive waste collection, the introduction of collection of separate, recyclable waste fractions from the premises of waste generators is not considered feasible at the moment. The Municipality will therefore introduce a bring system for recyclable waste.

The Municipality will identify a location within the Town of Hani i Elezit / Elez Han where waste generators can bring their recyclable waste. The area shall be large enough to allow accumulation of recyclable waste fractions till amounts are sufficient to warrant transportation for sale outside the municipality or even for sale outside Kosovo.

For some recyclable fractions, storage shall take place such that the waste is sheltered from the elements. This is the case most notably for waste paper and cardboard, the value of which will substantially diminish if exposed to precipitation. The location to be identified shall therefore include a warehouse type building or be equipped with (shipping) containers to store the recyclable waste fractions.

In order to motivate waste generators to bring their waste to the recycling location, the Municipality intends to pay for clean recyclable material handed in. Prices to be paid will depend on market prices which will be investigated prior to setting up the bring system.

The location for recyclable waste will be managed by the same company that will provide waste collection services. The company will be required to keep a detailed administration of waste amounts accepted and payments made and report to the Municipality on a monthly basis.

In addition to recycling, the Municipality supports the recovery of energy from waste. In this respect the Municipality will support the activities of the Sharrcem cement factory to set-up a pilot plant for the production of refuse derived fuel (RDF) at the Ferizaj transfer station. The Municipality will actively follow the developments and link up with the initiative where feasible and beneficial.

### 3.4 Clean-up of Illegal Disposal Sites

The clean-up of illegal disposal sites will have the continuous attention of the Municipality and clean-up actions will be taken on a day to day basis. Limited actions will be undertaken in spite of the likelihood that, as long as 100% waste collection coverage has not been realised, waste generators will continue to use the locations of the illegal disposal sites and illegal disposal sites will re-emerge after clean-up. Extensive clean-up operations will however have to wait till waste collection services are provided to all waste generators. Only in this case the re-emerging of illegal sites can be prevented. All in all, through continuous efforts, public awareness campaigns and expansion of waste collection services, all illegal disposal sites shall be eliminated by 2017 at the latest.

Municipal solid waste from the illegal disposal sites will as much as possible be removed from the sites. However, the Municipality has limited resources and coverage of waste with soil, construction and demolition debris or materials found at or near the site will have to be the rehabilitation method of choice at the majority of sites. The latter will especially be the case for sites where construction and demolition waste has been illegally disposed. Such sites can be found outside several of the villages in the municipality.

### 3.5 Management of Construction Waste

The Municipality of Hani i Elezit / Elez Han intends to improve its landscape and fill-in several of the existing erosion gullies and natural depressions in order to extend the area of utilisable land. The locations to be filled in will be designated as filling site as meant in article 5 of the administrative instruction No 05/07 for construction and demolition waste. This implies that only clean, inert construction and demolition waste can be deposited. Contaminated material shall be disposed of at a landfill and shall thus be collected by the waste management company or transported to the landfill outside the municipality by the waste generator.

Management of the filling sites will be limited to occasional shaping and heaping of construction and demolition waste deposited and the final shaping of the filling site in preparation of utilisation of the site for the intended purpose (being a leisure park in case of the current filling site). For this management of the site, the Municipality will engage a private contractor. The realisation of the park on the location of the current site is not part of the site management and will thus be addressed in other municipal planning documents.

In view of the limited amounts of construction and demolition waste being generated in the municipality, only one filling sites will be allowed to be operational at a time. Only after the filling of current site has been completed, will a new filling site be designated. In order for this to be fully implemented, closure and rehabilitation of illegal disposal sites used for construction and demolition waste will be required (refer to section 3.4).

### **3.6 Street cleaning**

In order to improve the cleanliness of the streets and public places, the Municipality will allocate funds within the municipal budget to allow the private company to engage two additional employees to conduct street cleaning on a permanent basis. The possibility to utilise mechanical street cleaning equipment, in a later stage, will be investigated.

## IV. Funding of Waste Management

### 4.1 Waste Fees

As is currently the case, the Municipal Assembly will also in future determine the fees to be paid for waste collection services. The Municipality will base the fees on the polluter pays principle whereby all waste generators will have to pay for the collection and disposal of the waste they generate. However, to keep the fees affordable some form of cross subsidisation is and will be incorporated in the fee system. The larger businesses, utilising 1100 litre waste containers, will have to pay a slightly higher fee per unit (volume) of waste generated than households.

As mentioned in section 1.1.5 the current fees are:

- Households using a 120 litre bins: € 3,00 per month
- Business pay a fee varying between € 5.00 and € 15.00 per month
- Larger businesses using 1100 litre containers pay € 12 per container lift or approximately € 50 per month in case of weekly waste collection or € 100 per month in case of collection twice per week.

The Municipality aims to keep the fees as low as possible and does not want to increase current fees during the planning period till 2019. However, the total revenues from waste collection fees shall be sufficient to cover the total costs of providing the waste collection and street cleansing services. In order to be able to keep the fees at their current level, the efficiency of fee collection will have to be improved. From 2015 onwards, the fees will therefore no longer be collected by the waste management company but by the Municipality. In the same year the fee collection rate shall be increased to 70%.

All fees shall be paid to the Municipality while the Municipality will pay the contractor for his services. In order to be able to pay the contractor in full and on time, fee collection rates shall be around 90%. This provides the Municipality with the opportunity to support those who cannot afford to pay their fees in full. Those who are living in poverty will be allowed to pay a reduced fee rate, the level of which will be determined by the Municipal Assembly.

In order to ensure sufficient income to cover the costs of waste management services, a pro-active fee collection method will be applied as will sanctions for non-payment. Waste generators will be required to pay for waste collection services at the municipal offices but those who don't will be visited at their place of residence or place of business. In these cases, a fee collection cost of 10% of the waste fee will be added to the waste collection fee, although initially this additional fee collection charge will not be applied and the costs of fee collection will be covered by the budget for promotion of payment and utilisation of waste collection services (refer to action plan).

For the disposal of construction and demolition waste at the filling site, a disposal fee will be introduced. The fee will be determined by the MA but here a tentative fee of € 3.00 per tonne is mentioned.

### 4.2 Support from Municipal Budget

The Municipality will allocate funds for the collection of waste from their premises as well as from the schools, the clinic and the fire fighter station. In addition, funds will be allocated for the continuous improvement of street cleansing, the planned clean-up of illegal dumpsites and the removal of illegally dumped waste the generator or owner of which cannot be established. In case the waste generator or owner of illegally dumped waste can be established, the Municipality will recover the costs from the waste generator or owner.

The Municipality will further allocate funds for public awareness activities and training of their staff as described in the following chapter of this plan.

Self-revenues generated in Hani i Elezit will be used for capital investments including the procurement of a waste collection vehicle.



## V. Support Measures

### 5.1 Public Awareness Campaign

The municipality regards raising awareness as a key activity to ensure the successful implementation of this waste management plan. However, the Municipality also realises that a public awareness campaign can only reach the intended results if such campaign is accompanied by activities on the ground. Public awareness activities will therefore be undertaken along site improvement of waste collection services. Awareness activities will for instance be conducted together with the extension of waste collection to villages that currently do not enjoy such service.

A campaign to increase the efficiency of fee collection will be started as soon as the Municipality takes over the actual fee collection from the waste management company. Information will be disseminated through a circular letter informing all waste generators, both businesses and households, about the changes to be implemented and the consequences of non-payment. In order to increase and maintain a willingness to pay among waste generators, the financing of waste management services will be made as transparent as possible and, as part of the raising of the public awareness, the Municipality will make the costs and revenues related to the provision of waste management services public. At least once per year the Municipality will publish a financial report detailing the expenditures and revenues.

It is the aim of the Municipality to target the youth through a mandatory environmental education school programme. Since the Municipality recognises to lack the capacity to develop such programme, advice will be sought from the MESP<sup>3</sup> and the Ministry of Education. Both Ministries will be approached with the request to identify suitable, existing programmes within Kosovo or abroad and to provide the Municipality with the necessary information and assistance to initiate the school programme at the start of the coming school year in September 2014. The school programme shall provide general environmental education in which waste and waste management will be addressed as highly relevant, local topics.

### 5.2 Training Programmes

The Municipality recognises the need for the development of waste management expertise and skills among municipal staff. In addition environmental inspectors need to develop capacity to collect evidence against offenders and to build a case against them such that successful prosecution in a court of law can be achieved. The Municipality will therefore stimulate staff members to identify relevant waste management seminars and training courses that will be organised in Kosovo or in the Balkan Region. Such training courses could include trainings to be organised by MESP as anticipated in the National Plan on Waste Management.

Staff members directly involved in waste management, either in waste management planning or in waste management supervision will be allowed and stimulated to attend seminars and training course up to 10 working days each year while staff members indirectly involved in waste management such as the members of the working group on waste management will be allowed to attend seminars up to 5 working days each year. The attendance and travel costs associated with these seminars and training courses will be covered from the municipal budget.

In case donor funding is available for the attendance of training, the limitation of 10 and 5 working days does not apply and training outside the Balkan Region may also be attended.

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<sup>3</sup> *The development of an educational programme is anticipated in the National Plan on Waste Management.*

## **VI. Regulation and Enforcement**

### **6.1 Elaboration of regulations on waste management**

The provisions regulating waste management in Hani i Elezit / Elez Han are included in the Regulations on Environmental Protection of 2006 which have been adopted by the Municipal Assembly (MA).

The current regulations on environmental protection do however not include the obligation of waste generators to pay for waste collection and disposal services. The Municipality will therefore critically review the current regulations and will propose to the MA to include the obligation of waste generators to pay the fee, which will be set by the MA and reviewed on an annual basis. It will be proposed that non-payment of the fee will be made punishable by a fine.

The proposals will be drafted as a revision of the Regulations on Environmental Protection and be submitted to the MA for adoption in 2014.

### **6.2 Enforcement**

Upon adoption of the revision, the municipality will start the enforcement of the waste management provisions of the Regulations on Environmental Protection as well as the Law on waste. Emphasis of enforcement will be on the payment of the waste management fee. Those avoiding payment will be identified by comparing the register of households and the register of business with the receipt issued for payment of the waste management fee. Non-payers will be visited by a fee collector who in first instance will only collect the fee and provide information about the reasons for and necessity of payment of the waste management fee. In case of prolonged avoidance of payment and in case of repeat offenders, the inspector responsible for the environment will accompany the fee collector and impose a fine on top of the waste collection fee. In a later stage a fee collection surcharge will be introduced.

In addition enforcement activities will aim at the prevention of illegal waste disposal in the municipality and the recovery of the costs of removal of illegal disposed waste from the offender. If required, offenders will be taken to court. However, enforcement activities will be carried out only in areas of the municipality where waste collection services are being provided. Enforcement activities in villages where waste is currently not collected will be started up only after introduction of waste collection services and the conduct of a public awareness campaign. Prior to the introduction of waste collection, waste generators will be encouraged to transfer their waste to a public bin in the Town of Hani i Elezit / Elez Han.

## **Annex I. Members of the Working Group for Development of the Municipal Waste Management Plan**

- Mendu Vlashi, Deputy Mayor
- Refet Kalisi, Director of Public Services
- Sevime Laqi, Director of Economic Development
- Muzafer Dernjani, Director of Health
- Kujtim Dernjani, Chief of Public Services Sector
- Fatbardha Bushi, Environment Officer,
- Bajrush Laqi, Legal Officer,
- Xhemshit Kalisi, Officer,
- Besnik Reçi, Officer

### Advisers

- Jan Tesink, Waste Management Expert,
- Doruntinë Rexhepi, Environmental Officer, and
- Sami Stagova, Spatial/Urban Planner

## Annex II. Action Plan

<b>Objective 1:</b> Improvement of waste collection service throughout the Municipality of Hani i Elezit / Elez Han			
<b>Desired Outcome:</b> Waste collection from 100% of waste generators by the end of 2015			
<i>Actions / steps / Projects</i>	<i>Division of responsibilities</i>	<i>Timeline and cost (€)</i>	<i>Funding by</i>
Preparation of tender documents for new or refurbished 12 to 14 m <sup>3</sup> (12 tonne) waste collection vehicle	Municipality	4 <sup>th</sup> quarter 2014	
Elaboration of business plan and for Municipal owned public waste management company and application for consent from central government to establish such company	Municipality/external specialist	4 <sup>th</sup> quarter 2014; submission of application January-February 2015 (€ 500 to € 1,000)	Municipality
Procurement of waste collection vehicle	Municipality	1 <sup>st</sup> quarter 2015 (€ 80,000.-)	Municipality, donor
Establishment of Municipal company or (in case of negative response from central government) selection of private company to operate waste collection vehicle	Municipality	March 2015	
Conclusion of contract between Municipality and Waste Collection Company	Municipality and Waste Collection Company	March 2015	
Start-up of improved waste collection services and informing inhabitants and businesses of improved services by circular letter and/or brochure	Municipal or private company; Municipality	March-April 2015 (€ 250)	Municipal budget
Promotion of payment and utilisation of waste collection services	Municipality through circular letters, brochures, meetings and visits to non-payers	From March 2015 onwards (€ 2,000 / year)	Municipal budget
Monitoring, information and reporting	Working Group, Inspector responsible for the	Continuously	

	environment, waste collection company		
Service Evaluation	Overseeing Commission	Twice yearly	

**Objective 2: Promotion of Composting**

**Desired Outcome:** At least ten households in the Town of Hani i Elezit / Elez Han compost the organic waste they generate by 2016, feasibility study on centralised composting conducted by 2017

<i>Actions / steps / Projects</i>	<i>Division of responsibilities</i>	<i>Timeline and cost (€)</i>	<i>Funding by</i>
Consultations with village heads and identification of individuals willing to start composting their organic waste	Working Group, village heads, PR official	May – July 2015	
Collection and printing of information on composting	Municipality,	Until June 2015 (€ 150)	Municipal budget
Procurement of materials for compost bin construction and/or procurement of commercially available compost bins	Municipality	March 2016 (€ 750)	Municipality or donor
Assembling of compost bins and start-up of composting	Individuals with support of municipal staff	April 2016	
Regular meetings of individuals practicing composting	Individuals, Municipality and NGOs	Monthly from March till September 2016	
Monitoring, information and reporting	Working Group, Inspector responsible for the environment	Every two months from March 2016 onwards	
Study on the feasibility of centralised composting by waste management company	Waste management company; Municipality; external expert	4 <sup>th</sup> quarter 2016 (€ 500 to € 1,000)	Municipality or donor
Identification of possible locations for centralised composting	Municipality; external expert	1 <sup>st</sup> quarter 2017 (included in feasibility study)	
Preparation of location for centralised composting	Municipality; private sector	To be determined	To be determined
Start-up of separate collection of organic waste fraction from market, green areas and volunteering waste generators; start-up of	Waste management company	To be determined	To be determined

centralised composting			
<b>Objective 3: Introduction of recycling</b>			
<b>Desired Outcome: Bring System for Recyclable Waste Fractions Successfully Introduced</b>			
<i>Actions / steps / Projects</i>	<i>Division of responsibilities</i>	<i>Timeline and cost (€)</i>	<i>Funding by</i>
Selection of location for collection and accumulation of recyclable fractions, paper and cardboard, metals including metal cans and plastics	Municipality	November 2014	
Market study on demand for and prices of recyclable waste fractions; volatility of prices	Municipality, external expert	October – December 2014 (€ 500 to € 1,000)	Municipality or donor
Procurement of containers	Municipality	January 2015 (€ 7,000)	Municipality or donor
Production of information material: signs near containers, stickers on container and brochures	Municipality	February 2015 (€ 500)	Municipality
Preparation of location, placement of signs and containers	Municipality, contractor	March 2015 (€ 300)	Municipality
Official event for taking location into use	Municipality, journalists	March 2015	
Arranging transport and sale of recyclable fractions	Waste Management Company	Monthly or quarterly from 2 <sup>nd</sup> quarter 2015 onwards	
Monitoring and evaluation	Working Group, Inspector responsible for the environment, Financial Officer	Every two months from March 2015 onwards	
Upgrading of recycling zone, for instance with baling press and/or plastic shredder and washer	Municipality	To be determined on basis of monitoring and evaluation	Waste Management Company (revenues from sale of recyclable fractions)

<b>Objective 4: Clean-up of Illegal dumpsites</b>			
<b>Desired Outcome: All illegal dumpsites eliminated by 2017</b>			
<i>Actions / steps / Projects</i>	<i>Division of responsibilities</i>	<i>Timeline and cost (€)</i>	<i>Funding by</i>
Survey of all illegal dumpsites, preparation of maps and detailed assessment of waste amounts	Municipality (Geodesy department)	March - July 2016	
Elaboration of tender documents for selection of a private company to conduct routine clean-up works at illegal disposal sites	Municipality	August 2016	
Selection of contractor	Municipality	September 2016	
Commencement of routine clean-up works marked by public event	Municipality, contractor, journalists	September/October 2016	
Execution of the works	Contractor	October 2016 till end 2017 (€ 25,000 to € 30,000)	Municipality, Government plus donor
Supervision, monitoring and evaluation	Inspector for the environment and inspector for civil works	October 2016 till end 2017	

<b>Objective 5: Utilisation of Construction and Demolition Waste</b>			
<b>Desired Outcome: Construction and demolition waste utilised</b>			
<i>Actions / steps / Projects</i>	<i>Division of responsibilities</i>	<i>Timeline and cost (€)</i>	<i>Funding by</i>
Utilisation of construction and demolition waste	Road contractors (among others)	From July 2014 onwards	
Shaping of construction and demolition site and works to keep filling site accessible	Private company to be contracted by Municipality	From July 2014 till end 2019: quarterly (€ 4,000 per year)	Municipal budget (ultimately from C&D- waste disposal fee)
Closure of current filling site and preparation of the site for the realisation of a park	Municipality	Mid 2016 (€ 10,000)	Municipality (in part from C&D waste disposal fee)

(realisation of park not included)			
Identification of new filling site for the utilisation of construction and demolition waste (in Gorance area)	Municipality	July 2016	
Informing generators of the designation of a new filling site	Municipality through meeting with all construction and demolition waste generators	July 2016	
Monitoring and evaluation	Inspectors	From July 2014 onwards	

**Objective 6: Continuous Improvement of Street Cleansing**
**Desired Outcome:** Cleanliness of Streets and Public Spaces Improved

<i>Actions / steps / Projects</i>	<i>Division of responsibilities</i>	<i>Timeline and cost (€)</i>	<i>Funding by</i>
Allocation of funds for street cleaning and amendment of contract with waste management company to engage two additional street sweepers	Municipality	January 2015	
Improved street cleansing activities	Waste management company	From January 2015 onwards (6,000 per year)	Municipal budget
Investigation of possibilities for the introduction of mechanised street cleaning	Municipality	January – March 2016	
Monitoring and evaluation	Inspectors	From January 2015 onwards	



## Overview of cost per year and per activity

	Year	2014	2015	2016	2017	2018	2019	Totals
<b>Objective</b>								
1 Improvement of waste collection services		€ 1,000	€ 82,250 *)	€ 2,000	€ 2,000	€ 2,000	€ 2,000	€ 91,250
2 Promotion of composting			€ 150	€ 1,750				€ 1,900
3 Introduction of recycling		€ 1,000	€ 7,800					€ 8,800
4 Clean-up of illegal dumpsites				€ 15,000 **)	€ 15,000 **)			€ 30,000
5 Utilisation of C&D waste		€ 2,000	€ 4,000	€ 14,000	€ 4,000	€ 4,000	€ 4,000	€ 32,000 ***)
6 Continuous improvement of street cleaning			€ 6,000	€ 6,000	€ 6,000	€ 6,000	€ 6,000	€ 30,000
Totals		€ 4,000	€ 100,200	€ 38,750	€ 27,000	€ 12,000	€ 12,000	€ 193,950

*Cost to be covered from the Municipal budget with the following exceptions*

*\*) Donor contribution anticipated*

*\*\*\*) Contributions from central government and donor anticipated*

*\*\*\*) In part covered by C&D waste disposal fees*

## Annex III. Sharrcem waste data

### Waste generation 2013

Waste type	Waste code *)	Waste code **)	Waste amount
Mixed domestic waste	200108	200301	35.6 tonnes
Scrap metal	160117	170405	308 tonnes
Refractory bricks	101308		330 tonnes
Torn cement bags		150101	4.2 tonnes
Plastic packaging waste	150102		1.9 tonnes
Waste from demolition	885032	170101	885 tonnes
Wooden pallets	150103		81 tonnes

### Waste utilisation 2013

Waste type	Waste code *)	Waste code **)	Waste amount
Fly ash	100102		95,316 tonnes
Bottom ash		100101	15,281 tonnes
Pyrite ash		??	7,154 tonnes
Refractory bricks	101308		50 tonnes

\*) Waste codes as provided by Sharrcem

\*\*) waste code by WM-expert

