DRAFT[1]

REPORT ON THE IMPORT AND EXPORT OF WASTES DESTINED FOR FINAL DISPOSAL OR RECOVERY OPERATIONS FOR THE YEARS 2010, 2013 AND 2016

[1] of 6 November 2018

CONTENTS

TABLES

FIGURES

Executive Summary

While the number of validated reports in 2010 and 2013 was stable at 59 and 57 parties respectively, it increased to 77 in 2016. This is mainly due to the increase in reports from the UN Groups Africa, Asia and GRULAC. While in 2010 the vast majority of reporting Parties reported both exports and imports, the ratio has converged in 2013 and turned to more Parties reporting only exports in 2016. There is no party that only imports waste.

The Parties from the WEOG Region import and export the largest amount of wastes. The figures also show that the share of imports and exports from and to other UN regions has increased between 2010 and 2016. This can mainly be explained by the increasing number of countries transmitting national reports.

Concerning the export and import of waste for final disposal, the waste treatment processes incineration (D10) and landfilling (D1/D5) are the most common operations followed by chemical physical treatment (D9). Exports and import for recovery are mainly destined for energy recovery (R1), followed by metal recycling (R4) and recycling of inorganic substances (R5).

While a variety of waste streams are destined for incineration (D10), specific waste streams such as asbestos (Y36) are landfilled. Also a variety of waste streams are destined for energy recovery (R1), with household waste (Y46) being a predominant stream. In particular, lead (Y31), copper (Y22) or zinc (Y23) are shipped for metal recycling (R4). Significant waste streams in the recycling of inorganic substances are incineration ashes (Y47), or inorganic fluorides (Y32) or cyanides (Y33).The analysis based on A codes and the movements of all three reporting years shows that, when exporting waste for final disposal, the export of asbestos waste (A2050) to landfill (D1) outweighs all other waste streams shipped. Similarly to the review of the Y codes, a variety of waste streams are exported for chemical physical treatment (D9) and for incineration (D10). The figures also show that, when importing waste for final disposal, predominant operations are D1 and D10 followed by D9. The largest waste stream destined for D1 is asbestos waste (A2050).

With respect to movements of wastes (with A code) destined for recovery operations, the largest amounts of waste exported are destined for metal recovery (R4), energy recovery (R1) and recycling of inorganic substances (R5). A variety of exported waste streams are destined for such recovery operations. The data also show that, when importing waste for recovery purposes, the predominant operations are metal recycling (R4), the recycling of inorganic substances (R5) and energy recovery (R1). A variety of waste streams are imported for such purposes.

Among the validated national reports, while a number of Parties specify only one disposal operation, some Parties specify a combination of such operations. Such combinations were used much more frequently by the exporting countries than by the importing countries. It is observed that a combined use of R-codes is more common than the combined use of D codes. The non-specific procedures D13, D14 and D15 are also frequently used in the disposal procedures for the application of preparatory treatment steps and combined with subsequent steps. Concerning the R codes mainly R1, R4 and R12 are used very often combined with other R codes. Preparatory steps can include sorting, separation, shredding, classification and similar procedures. Therefore it is not surprising that the not very specific codes R11, R12 and R13 which are often used for preparatory steps are very often combined with other R codes.

Only some parties use combined D and R codes. D1, D9, D10, D15 and D5 are often combined with R codes: 5 importing countries and 12 exporting countries.

The combination of procedures D1 with D2 and or D5 suggests that the wording of these procedures is not precise enough to distinguish them from each other. The combination of D1/D5 with different R codes indicates that recyclable materials, e.g. metals (R4) or minerals (R5), are separated from wastes prior to landfilling.

For the little or not used procedures D2 (land treatment), deep injection (D3), surface impoundment (D4) or release into seas (D7) it might be examined whether and in which wording a precision can be achieved.

It can be noted that all R codes are applied in the three reference years, while some D codes are not applied. Most wasted moved for final disposal are destined for landfilling (D1) or for incineration (D10). Most wastes moved for recovery are destined for energy recovery (R1), recycling of organic substances not used as solvent (R3), recycling of metals (R4), recycling of inorganic materials (R5) or "exchange of waste" (R12).

The combined use of R and D codes shows that the existing system for classifying disposal procedures may not sufficiently be differentiated and may no longer correspond to the reality in the waste management industry. This applies above all to cases in which a preparatory step (e.g. R11, R12 and R13) is followed by further disposal operations. Concerning final disposal the non-specific operations D 13, D 14 and D 15 are also frequently used to reflect preparatory treatment steps.

The largest quantities of waste for final disposal are exported and imported by WEOG countries followed by CEE countries. The countries of the other UN groups hardly play a role. This is true for all three reporting years considered. The WEOG countries also play the main role in the import of waste for disposal, followed by the CEE countries, with the exception of the reporting year 2013, where Africa and Asia import more than the CEE countries. Only the GRULAC countries do not import waste for disposal in any of the reporting years.

Concerning export and import of waste for recovery, the regions, which are of secondary importance in terms of disposal, are also of greater importance. However, the WEOG and CEE countries still play the main role. As far as the import of waste for recovery is concerned, it is noticeable that here the import into some GRULAC states is of increasing importance.

The disposal operations in the WEOG countries are mainly D1, D3, D5, D6, D8, D9, D10, D12, D13, D14 and D15, while in other regions D1, D5 and D10 are the most frequently reported.

By comparison, almost all processes are widely used for waste for recovery. This is particularly the case for the WEOG and CEE countries. It is noticeable that in other regions in particular the "provisional" recovery processes such as R 11, R12 and R 13 do not play a role.

With regard to the quantities shipped, operations D1, D5, D9 and D10 are of the greatest importance for waste for disposal. In the case of waste for recovery, these are operations R1, R4, R9 and R12.

The lack of consistency between the exported and imported quantities is mainly due to the fact that the reporting countries change during the three reporting years and the proportion of countries that only reported exports increased sharply from 2010 to 2016.

The general conclusion from the survey is that the classification system for disposal operations, which dates back to the last century, is outdated. Since its implementation, disposal technology has developed enormously. It is therefore necessary to adapt the classification system to reality, as it also plays an important regulatory role in the whole disposal process.

The following conclusions can be drawn from the examination of the application of the classification system for disposal operations in national reporting:

- the system is obsolete and incomplete
- it does not correspond to the currently used disposal operations
- there is too little differentiation and
- it is applied by users without clear rules.

It is noticeable that the D2, D4, D7 and D11 operations are not used after correction of typing errors or incorrect applications. This is pleasing in so far as they are not environmentally sound operations.

Furthermore, the fact that no rules on the application of disposal operations (D1, D5 and, to a lesser extent, D12) have been laid down or are laid down at national level suggests that users are unclear about the delimitation of the operations among themselves (or that there are national differences). Different types of landfill are now used in the waste management sector, e.g. for mineral waste, for household waste, for hazardous waste, etc. This should be taken into account in the revision of the disposal operations.

In order to ensure a comparable application of a classification system, it is therefore indispensable to establish rules of application.

Both disposal operations and recovery operations lack preparatory processes such as disassembly/sorting, classifying, separating, crushing, crushing or shredding as well as processes such as temporary interim storage. For this purpose, the procedures D13, D14 and D15 as well as R11, R12 and R13 are currently applied without clear and unambiguous rules. In this sense, D9 should be included in the review of disposal operations, since it is also a preparatory operation.

In contrast to the disposal operations, all recovery operations are used in the national reporting. However, there are similar problems with application as with disposal operations. One reason for this is that the processes R3, R4 and R5, which are predominantly used, are not very specific. The more specific operations such as R2, R6, R8, R9 and R10 lack clear rules for application.

In principle, when revising the disposal operations, it is necessary to ensure a clear demarcation of the operations between each other, either through wording or by supplementing them with application rules. This applies in particular to the definition of R1 and D10.

Introduction

1. By its decision BC-13/2, the Conference of the Parties to the Basel Convention at its thirteenth meeting established an expert working group (EWG) on the review of the Annexes I, III and IV and related aspects of Annex IX. During its first meeting held on 20-23 March 2018 in Geneva, Switzerland, the EWG, noting that a voluntary contribution from the European Union was available to that effect, requested the Secretariat to retain a consultant to help with the preparation of documents for a second meeting of the EWG, including to provide information on statistics pertaining to the D and R operations of wastes exported and imported under the Convention, based on the national reports transmitted by Parties.

2. The present report was prepared in response to the first meeting of the EWG, and on the basis of terms of reference developed in consultation with the co-chairs of the EWG. It sets out information on the D and R operations as they have occurred in practice in the years 2010, 2013 and 2016 based on the information on imports and exports transmitted by Parties in their annual reports pursuant to Article 13 paragraph 3 of the Convention[2].

3. Part I of the report presents information on the data used as a basis for the report while part II provides an analyses information on the D and R operations as they have occurred in practice.

1. DATA BASIS

4. The data used for the development of this report is the information reported by Parties in the relevant tables of the reporting format on exports and imports of wastes for the years 2010, 2013 and 2016, as validated by the Secretariat[3]. Table 1 below lists the validated reports. The table shows that whereas the reporting rate by Parties from the African and from the Latin American and the Caribbean regions has increased from 2010 to 2016, the reporting by Parties in other regions fluctuates. In general the rate of reporting has varied from 59 Parties in 2010, to 57 Parties in 2013, and to 76 Parties in 2016.

5. Minor adjustments have been made to the tables provided by the Secretariat, mainly to allow a better evaluation[4]. Systematic changes or adjustments have been made to the Y, R and D codes. With regard to the Y codes, only the first Y code was taken into account for the evaluations when specifying several Y codes. The specification of a non-specific Y code (Y_) was retained In cases where no Y code was specified but 1(1) b (for national hazardous waste) was entered, this was converted into the non-specific Y code (Y_). In cases where a hazard criterion was specified but no Y code was specified, the non-specific Y code (Y_) was also inserted.

[2] All reports are available on the website of the Convention at: http://www.basel.int/Countries/NationalReporting/NationalReports/tabid/4250/Default.aspx

[3] For the year 2016, the data are validated with processing status 31 August 2018.

[4] Concerning the export table for 2010, the data from Lichtenstein, which were identical to the data from Switzerland, were replaced by the original data from Lichtenstein provided by the Secretariat.

Table 1: Validated reports

UN region	Imports and Exports	Imports only	Exports only	Validated Reports
2010				
Africa	ZA		MU, TN, TG	4
Asia	AZ, CY, KZ, MY, PH, SG, TH, UZ,		AE, CN, JP, QA	12
CEE	BG, BY, CZ, EE, HU, LT, LV, PL, RO, SI, SK, UA		AM, HR, ME	15
GRULAC	GT, MX		AR, BR, CL, CO, HN	7
WEOG	AT, AU, BE, CA, CH, DE, DK, ES, FI, GB, IE, IL, IT, LU, NO, NZ, PT, SE		GR, LI, MT	21
2013				
Africa	ZA		DZ, MA, MZ, SZ, TG, TN,	7
Asia	AZ, IR, MY, SG, TH		AE, CN, CY, KG, OM, QA	11
CEE	BG, CZ, EE, HU, LT, LV, PL, RS, RU		GE, HR, ME	12
GRULAC	GT, MX		AR, BO, CO, DO, JM, NI, SV, UY	10
WEOG	AT, AU, BE, CA, DE, DK, ES, FI, GB, GR, IE, IL, NO, SE, PT		AD, MT	17
2016				
Africa	ZA		CD, CV, EG, ER, MA, MZ, SZ, TG, TN	10
Asia	BH, CY, MY, SG, PH, TH		AE, AZ, BN, CN, IQ, LB, QA, WS, YE	15
CEE	BA, BG, CZ, EE, HR, HU, LT, LV, PL, RS, RU, SI, SK		MD, GE, ME, AM	17
GRULAC	CR, GT, MX		AR, BB, BR, CO, CU, DO, HN, JM, LC, NI, SV, TT, UY	16
WEOG	AT, AU, BE, CA, CH, DE, ES, FI, GR, IE, IL, IT, SE, PT		AD, TR, MT, IS, NZ	19

6. With respect to the D and R codes, in instances where several codes were specified, only the first D or R code was taken into account . In instances where an unspecified D or R code was used (D_ and R_) and in the few instances where no D or R code was mentioned, the following approach was used:

(a) In the event a materially identical shipment with indication of a specific D or R code was reported, then that code was taken into account;

(b) In the event no shipment of identical waste was reported, , a D or R code was assigned taking into account the waste description or the waste code (A list or European waste code), for example as follows: R9 or D1 for waste oil, R3 for toner waste, D10 for PCB waste, and R2 for solvents.

(c) In the event no meaningful assignment was possible, code R12 or D15 was used.

7. These adjustments were necessary in order to carry out general statistical evaluations based on the quantities shipped and based on specific Y, R and D codes. The analysis of information on the combined use of R and D codes is set out in tables 2, 3 and 4 below.

2. RESULTS OF THE SURVEY

2.1 Combined use of R and D codes

8. Among the validated national reports, while a number of Parties specify only one disposal operation, some Parties specify a combination of such operations. These combined uses of codes were examined, and the results are compiled in Tables 2, 3 and 4 below. Such combinations were used much more frequently by the exporting countries than by the importing countries. In relation to the quantities shipped, the percentages were 2.7% to 13% for waste exported for disposal and 3% to 16% for waste exported for recovery. With regard to waste imports, the proportions were between 0.1% and 5.1% for waste imported for disposal and between 0.6% and 6% for waste imported for recovery. The number of parties ranged between 2 and 34, with the WEOG and CEE countries being particularly involved in both exports and imports. While only WEOG and CEE were involved in the 2013 reporting year with the exception of one Asian country, the participation of other UN groups was higher in in 2010 and 2016. With regard to waste for disposal, four parties (3 WEOG and 1 CEE) used combinations for export and two for import (WEOG) in 2013, whereas 16 Parties (8 CEE, 7 WEOG and 1 Asia) used combinations for export of waste for recovery and 8 Parties (4 WEOG, 4 CEE) for import for recovery. In 2010 nine parties (6 WEOG, 1 CEE, 1 Africa) used combinations for export and eight for import (7 WEOG, 1 Africa), whereas 30 Parties (12 WEOG, 9 CEE, 5 Asia, 3 Africa, 1 GRULAC) used combinations for export of waste for recovery and 15 Parties (8 WEOG, 6 CEE, 1 Asia) for import for recovery. The distribution in 2016 is comparable to that in 2010, but more Parties from other regions are involved. Nine parties (2 WEOG, 3 CEE, 2 Africa, 2 Asia) used combinations for export and eight for import (7 WEOG, 1 Africa) for disposal, whereas 34 Parties (12 WEOG, 11 CEE, 4 Asia, 3 GRULAC) used combinations for export of waste for recovery and 14 Parties (7 WEOG, 6 CEE, 1 Asia) for import for recovery. Further details, in particular on the parties concerned, can be found in Table 52 in the Annex.

Table 2: Combined use of R codes

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
R1	--			X								X	X
R2	X	--											
R3	X	X	--	X								X	
R4	X	X	X	--								X	X
R5	X		X	X	--							X	X
R6				X		--							
R7	X				X		--						X
R8				X				--					
R9	X			X					--				X
R10										--		X	
R11	X			X	X				X		--	X	
R12	X	X	X	X	X						X	--	X
R13	X	X	X	X	X				X	X	X	X	--

9. Table 2 shows that a combined use of R-codes is more common than the combined use of D codes. Concerning the R codes, mainly R1, R4 and R12 are used, and very often combined with other R codes.

Table 3: Combined use of D codes

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
D1	--														X
D2	X	--													
D3			--												
D4				--											
D5	X	X			--				X				X		X
D6						--									
D7							--								
D8					X			--							
D9	X	X			X			X	--	X		X			X
D10	X								X	--			X	X	X
D11											--				
D12	X								X	X		--			
D13	X								X	X			--		

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
D14	X									X				--	
D15										X				X	--

11 Table 3 shows that the combined use of D-codes does not occur as often as the combined use of R-codes. D1 and D10 codes are those most often used together with other D-codes.

12. Table 4 gives an overview on the combined use of D and R codes. D1, D9, D10, D15 and D5 are most often combined with R codes, but only some Parties use this combination: e.g. 5 importing States and 12 exporting States.

Table 4: Combined use of D and R Codes

	D1	D2	D3	D4	D5[5]	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
R1	X	X	X		X				X	X		X			X
R2	X				X			X	X	X				X	
R3	X				X				X	X		X			X
R4	X				X			X	X	X		X			X
R5	X				X			X	X	X		X			X
R6															
R7					X				X	X					
R8															
R9	X				X										
R10															
R11															
R12	X		X							X					X
R13					X				X	X		X		X	

13. The following conclusions can be drawn from tables 2 to 4 above. The combined use of R and D codes shows that the existing system for classifying disposal procedures may not sufficiently be differentiated and may no longer correspond to the reality in the waste management industry. This applies above all to cases in which a preparatory step is followed by further disposal operations. Preparatory steps can include sorting, separation, shredding, classification and similar procedures. In such instances it appears that the codes R11, R12 and R13, which are often used for preparatory steps, are often combined with other R codes. This is particularly evident in the combined use of, for example, R 1 with R4 or R5. In those instances, an energy recovery operation is followed by the recycling of the slag and of the

[5] All from one Party

metal components from the slag. The same appears to apply in the case of the combination of D10 with R4 and R5. The combination of R2 with R1, and of R3 with R1 indicate separation into waste fractions by distillation, for example, followed by the recovery and recycling of the individual fractions. The recovery of metals (R4) is also used in combination with a number of other processes, e.g. the slag produced can be recovered after smelting (R5). If metal/plastic composite material is shredded and then separated by air separation, the recovered plastic can be recycled (R3).

14. The non-specific operations D 13, D 14 and D 15 are also frequently used to reflect preparatory treatment steps, and are combined with subsequent disposal operations. But D9 is also a classic operation in which one waste stream can be treated and several streams can be separated, e.g. in emulsion splitting. The combination of operations D1 with D2 and/or D5 may support the view that their description is not precise enough to distinguish them from one another. The combination of D1/D5 with different R codes indicates that recyclable materials, e.g. metals (R4) or minerals (R5), are separated from wastes prior to landfilling.

15. For the little or not used operations D2 (land treatment), deep injection (D3), surface impoundment (D4) or release into seas (D7) it would be worthwhile to examine whether a new description of the operations would lead to greater clarity and use.

2.2 General use of D and R codes

16. Table 5 below gives an overview of the use of D and R codes for the selected reporting years of 2010, 2013 and 2016.

Table 5: Overview of the use of D and R codes

Use of D codes	2010 Exports	2010 Imports	2013 Exports	2013 Imports	2016 Exports	2016 Imports
not used	D2 D4 D7 D11	D3 D4 D11	D4 D7	D2 D3 D6 D7 D11	D2 D7 D13	D2 D3 D4 D6 D7 D12
seldom used *≤ 50.000 t/y*	D3 D6 D8 D9	D2 D13 D14 D15	D2 D3 D6 D11 D13 D14 D15	D4 D14 D15	D3 D4 D6 D8 D11 D12 D14 D15	D13 D14 D15
mainly used *≥ 400.000 t/y*	D10 D1	D10 D1	D10 D1	D10 D1	D10 D1	D10 D1

Use of R codes	2010 Exports	2010 Imports	2013 Exports	2013 Imports	2016 Exports	2016 Imports
not used	--	--	--	--	--	--
seldom used *≤ 50.000 t/y*	R6 R10 R11	R6 R7 R8	R7 R10	R7 R8 R10	R7 R8 R10 R11	R6 R7 R8 R11
mainly used *≥ 400.000 t/y*	R1 R3 R4 R5	R1 R3 R4 R5	R1 R3 R4 R5 R12	R1 R4 R5 R12	R1 R4 R5 R12	R1 R4 R5 R9

17. Table 5 shows that all R codes are used in the three reference years, while some D codes are not used[6]. Table 5 also shows that most wastes moved for final disposal are destined for landfilling (D1) or for incineration (D10); and that most wastes moved for recovery are destined for energy recovery (R1), recycling of organic substances not used as solvent (R3), recycling of metals (R4), recycling of inorganic materials (R5) or "exchange of waste" (R12).

2.3 Use of D and R codes in the five UN regions

18. The following tables 6 to 17 show how the D and R codes were used in the five UN regions with respect to transboundary movements that took place in 2010, 2013 and 2016.

Table 6: Exports for final disposal in 2010 from the five UN regions (in tons)

2010 Exports	Africa	Asia	CEE	GRULAC	WEOG
D1		300	2596		471238
D2					
D3					4426
D4					
D5			46		4426
D6					
D7					
D8			221		
D9	400		4719	49	
D10		1839	25517	128892	658525
D11					
D12			170		105249
D13					16835
D14					7793
D15					831

[6] The references to D11 in 2013 and 2016, which only occur in export, but not in import, appear to be errors (D1 or D10 were probably meant)

Table 7: Exports for recovery in 2010 from the five UN regions (in tons)

2010 Exports	Africa	Asia	CEE	GRULAC	WEOG
R1		9351	7230		125761
R2		1094	856		67102
R3		1185	23972		11868
R4	27240	137917	140284	79426	1343190
R5	609	105192	51464	650	8106629
R6		2053	671		152887
R7	54		477		11988
R8		1793	2232		17464
R9			20736		1530966
R10					9273
R11		241	934		1293
R12		3205	10696		524852
R13			8417		48331

Table 8: Imports for final disposal in 2010 to the five UN regions (in tons)

2010 Imports	Africa	Asia	CEE	GRULAC	WEOG
D1					864396
D2 *)					82
D3					
D4					
D5					130438
D6					72
D7					
D8	72				68129
D9	15716				227500
D10	2964		5673		952611
D11					
D12					63527
D13					19226

*) used in combination with D5, D8 and R1

Table 9: Imports for recovery in 2010 to the five UN regions (in tons)

2010 Imports	Africa	Asia	CEE	GRULAC	WEOG
R1	300	14725	1535	4500	1960692
R2	240	54365	218	4008	74842
R3	500	56200	7999		988902
R4	13826	199566	612592	810609	988902
R5	13826	378880	444		1412237
R6		7696	671		28625
R7					7579
R8					9325
R9	6002	32179	1951	2000	269695
R10					50705
R11		20			7819
R12			8457		342695
R13			3296	218	117069

Table 10: Exports for final disposal in 2013 from the five UN regions (in tons)

2013 Exports	Africa	Asia	CEE	GRULAC	WEOG
D1	31050		382		178727
D2	80				
D3					9919
D4					
D5	32250	1,62	433		21072
D6					18425
D7					
D8			593		141635
D9	400		8541	804	242809
D10	54	1989	78152	348	1067963
D11					137
D12			346		43497
D13					14645
D14			924		7758
D15			1836		

Table 11: Exports for recovery in 2013 from the five UN regions (in tons)

2013 Exports	Africa	Asia	CEE	GRULAC	WEOG
R1	159783	686	17000	1078	6160117
R2	420	2140	1068	41	83955
R3		1792	456319		695351
R4	104331	133647	456319	113592	1408124
R5	120915	604	27198	100	1177082
R6	1500				176920
R7	80				21238
R8		26	3100		21657
R9	17570	17000	15921		262859
R10					2799
R11			14665		73439
R12			1163		698073
R13			2657		161148

Table 12: Imports for final disposal in 2013 to the five UN regions (in tons)

2013 Imports	Africa	Asia	CEE	GRULAC	WEOG
D1	4535				572551
D2					
D3					
D4					31
D5	1248				192954
D6					
D7					
D8					253676
D9					34941
D10		11692			1051065
D11					
D12					101553
D13					3843

Table 13: Imports for recovery in 2013 to the five UN regions (in tons)

2013 Imports	Africa	Asia	CEE	GRULAC	WEOG
R1		3627	197119	17880	3806259
R2		142	30097		66629
R3		6679	10868		829202
R4	813	45286	301082	1202530*)	1518893
R5			3264	2700	2169841
R6		304			76249
R7					56893
R8					17147
R9		1436	11882	30550	316947
R10			44		24347
R11			201700		14569
R12			12164		666452
R13			1302		94404

*) dominated by import of lead acid batteries to Mexico

Table 14: Exports for final disposal in 2016 from the five UN regions (in tons)

2016 Exports	Africa	Asia	CEE	GRULAC	WEOG
D1	4600	948	1595	1200	408528
D2					
D3					7864
D4			12		
D5	5142				46110
D6					4001
D7					
D8					8862
D9		4	11803	20	164677
D10	1533	3704	337933	1100	719886
D11					7
D12			611		32198
D13		400			9497
D14	1800				140
D15					32079

Table 15: Exports for recovery in 2016 from the five UN regions (in tons)

2016 Exports	Africa	Asia	CEE	GRULAC	WEOG
R1	4418	3604	39284	770	1070308
R2			1247		69554
R3	8072	2887	71163		141222
R4	101106	272768	251214	451992	141222
R5	1076	4578	61555		1102845
R6	1500	10	358		151921
R7	120		829		13655
R8		211	3265		19754
R9	4869		22482		114453
R10			29889		13625
R11					2589
R12			2984	1500	55107
R13		53	25978		55107

Table 16: Imports for final disposal in 2016 to the five UN regions (in tons)

2016 Imports	Africa	Asia	CEE	GRULAC	WEOG
D1	700				645838
D2					
D3					
D4					
D5	35650		57		27332
D6					
D7					
D8		4			66841
D9	200		268		189170
D10			299514		447050
D11					
D12					53468
D13					4020
D14					182
D15			7832		1967

Table 17: Imports for recovery in 2016 to the five UN regions (in tons)

2016 Imports	Africa	Asia	CEE	GRULAC	WEOG
R1	9500	75988	295503	20378	3131295
R2			617	18040	33192
R3		12243	45302		136450
R4	38528	40841	747905	678711	1141410
R5			51151		759880
R6	1500				15234
R7					21151
R8		1053			13960
R9	192011	11237	66099	90000	323384
R10			56369		
R11					10016
R12			59495	360	390996
R13			7460		40616

19. Tables 6 to 17 reflect the growing reporting of countries from 2010 to 2016 as shown in table 1. The patterns for export and import for final disposal reflect the regulatory regime under the Basel Convention and other frameworks such as the EU Waste Shipment Regulation or national imports or export restrictions and prohibitions. The patterns for export and import for recovery are also driven by economic and technical factors, for instance the availability in the CEE and WEOG countries of a variety of waste disposal technologies.

2.4 Use of A Codes (Annex VIII)

20. The use of A codes in national reports is not as common as the use of Y codes. Based on the waste amounts exported and imported, A codes are used for:

(a) 41% of the waste imported in 2010

(b) 15% of the waste exported in 2010

(c) 19% of the waste imported in 2013

(d) 13% of the waste exported in 2013

(e) 4% of the waste imported in 2016

(f) 13% of the waste exported in 2016.

21. As the A codes were less used than the Y codes, the data for 2010, 2013 and 2016 for both exports and imports were combined in one table each. This means that the export data for 2010, 2013 and 2016 have been converted into a table with the export data (table 44 in Annex) and the same has been done with the import data (table 46 in Annex). Data for every single A Code use are given in the tables 45 and 47.

2.5 Overview of exports and imports per UN region

22. The following figures shows the exports and imports based on the UN regions and on the amount of waste moved.

Figure 1: Exports from UN regions for the reporting year 2010

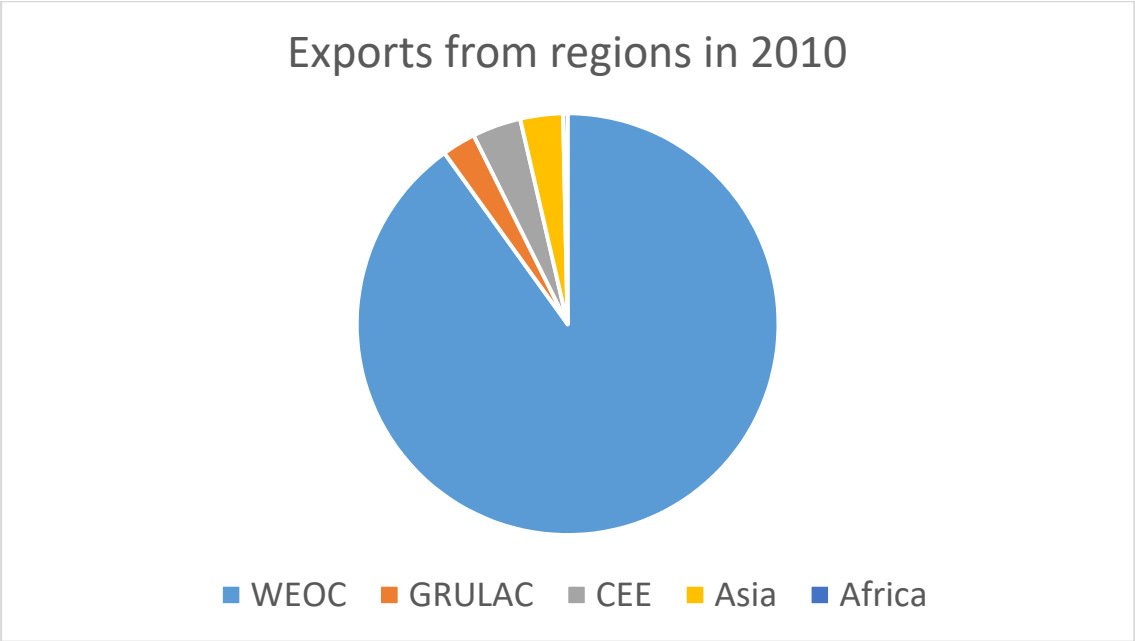
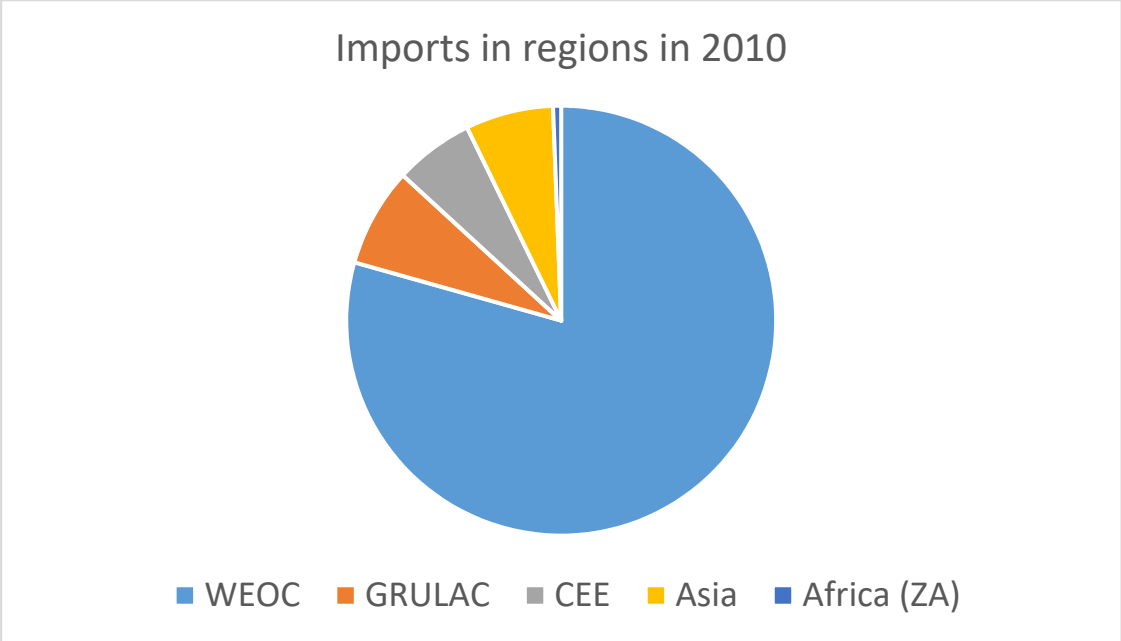
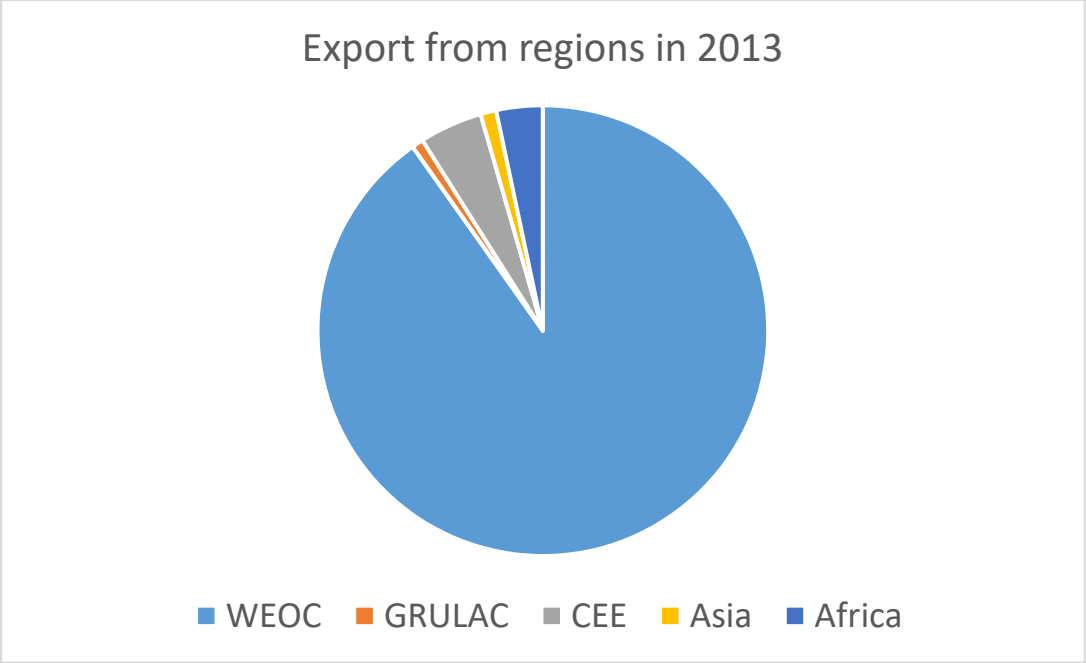


Figure 2: Imports in UN regions for the reporting year 2010



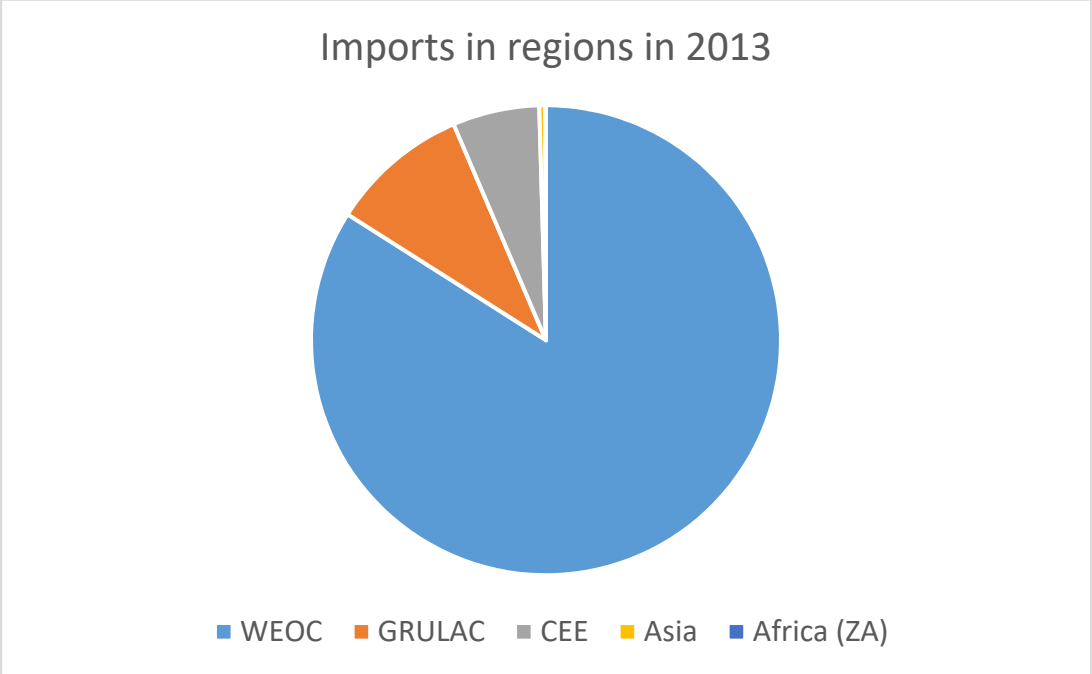
23. Within the GRULAC region, the two only importing countries are Mexico and Guatemala, with the former mainly importing lead acid batteries for recovery. The imports in the CEE region have been dominated by two imports of slags to Belarus (B1200 and B1210 classified as H13). South Africa is the only importing country in the African Region.

Figure 3: Exports from UN regions for the reporting year 2013



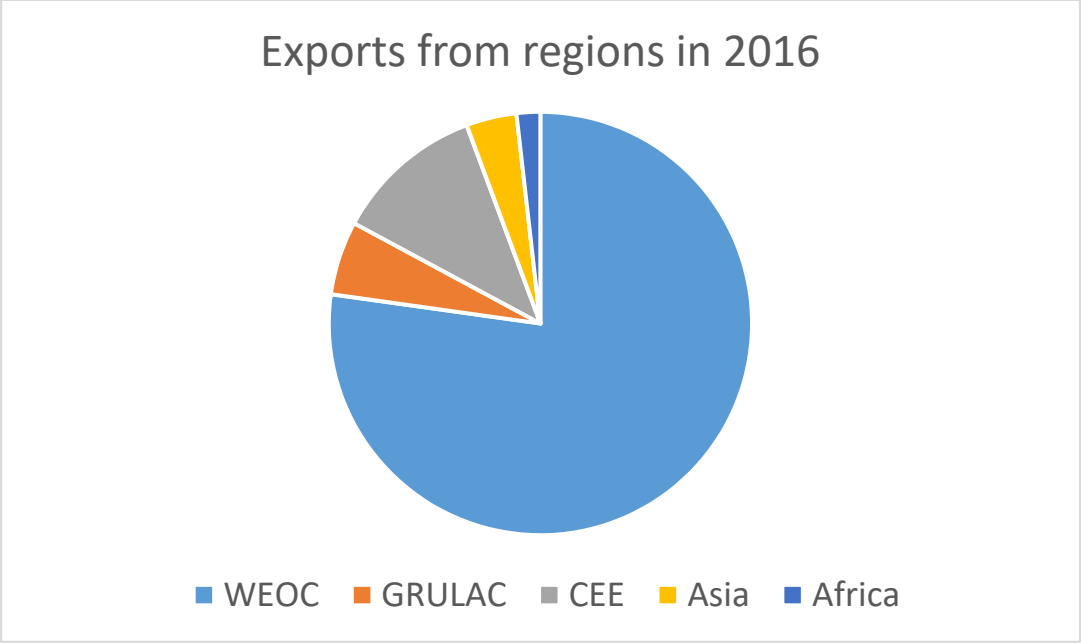
24. Compared to 2010, more exports in 2013 took place from the CEE and Africa regions.

Figure 4: Imports in UN regions for the reporting year 2013



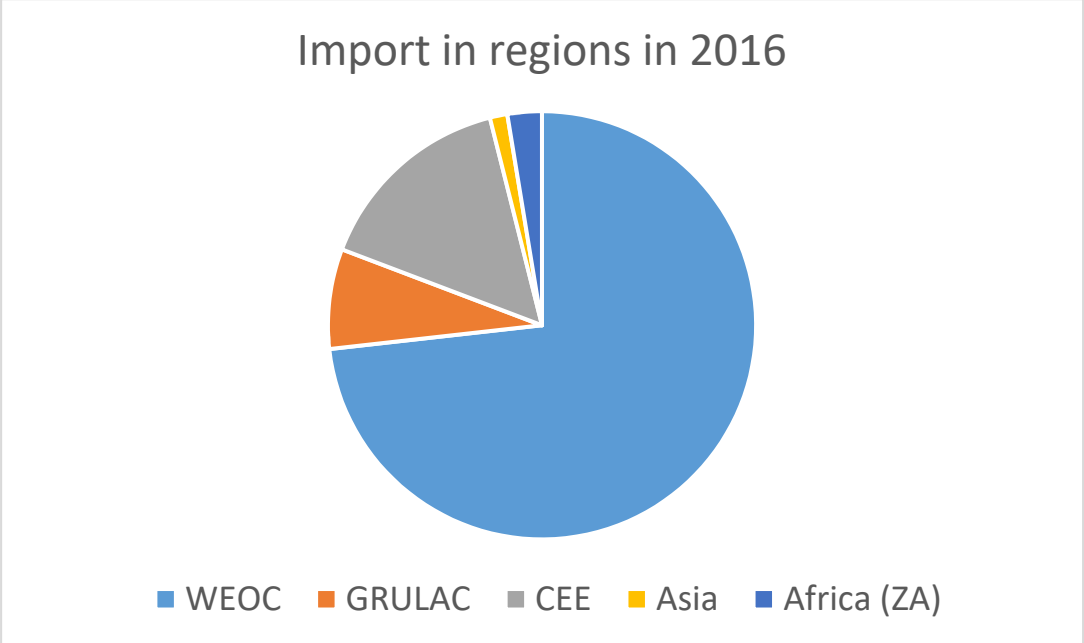
25. Compared to 2010, relatively more imports took place in 2013 in the CEE and GRULAC regions. As in 2010, only two countries from the GRULAC region, namely Mexico and Guatemala, have reported imports, again mostly of lead acid batteries. The rise in imports compared to 2010 appears to result from more complete reporting by the countries in the CEE region. Half of the imports in the countries of the CEE region have been of slag to Russian Federation.

Figure 5: Exports from UN regions for the reporting year 2016



26. Compared to 2013, the countries in the CEE region have reported more waste movements. In addition, the number of countries from the GRULAC region that have transmitted national reports has significantly increased in 2016 compared to 2013.

Figure 6: Imports to UN regions for the reporting year 2016



27. In 2016, the only importing country in the Africa region is South Africa. Importing countries from the GRULAC region are Mexico, Guatemala and Costa Rica, and the wastes most imported are lead acid batteries. Most of the importing countries in the CEE region are States that are members of the European Union.

28. In conclusion, the figures 1 to 6 show that the Parties from the WEOG region import and export the largest amount of wastes. The figures also show that the share of imports and exports from and to other UN regions has increased between 2010 and 2016. This can mainly be explained by the increasing number of countries transmitting national reports (see Table 1). One indicator for this is that the imbalance between imports and exports in the reporting years 2010 and 2013 has almost balanced in the reporting year 2016.

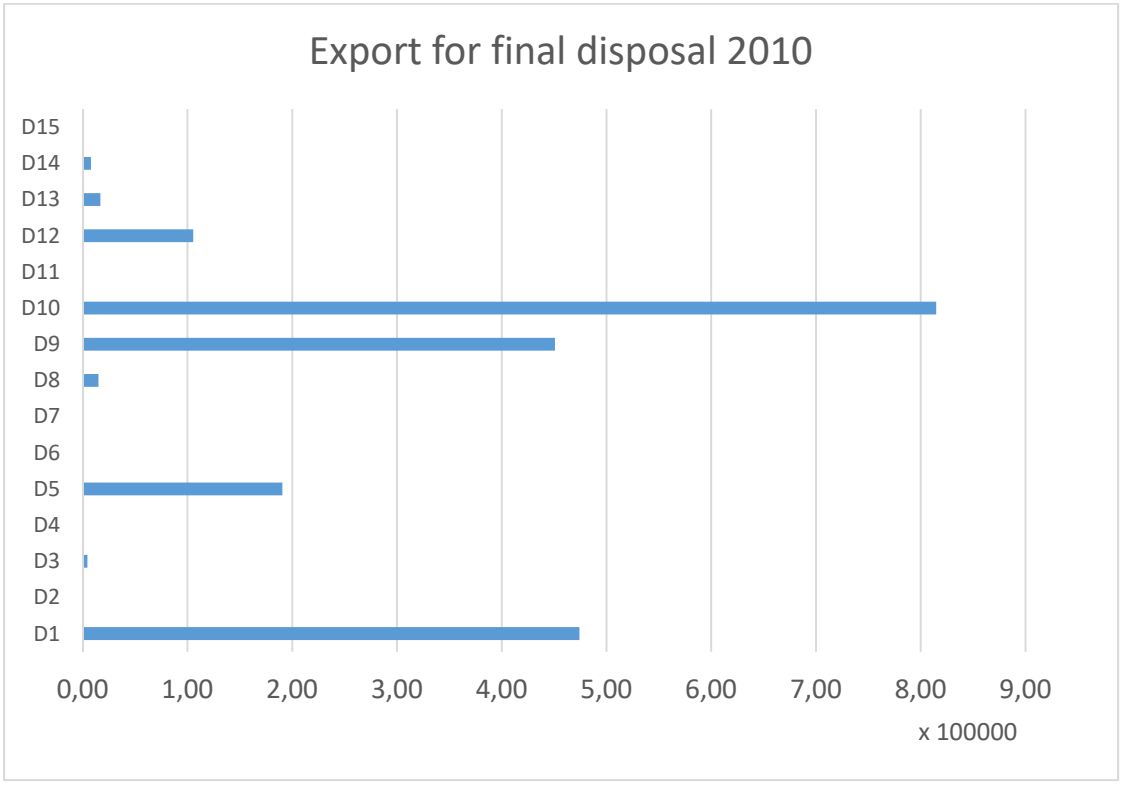
2.6 Use of D and R-codes

29. The following figures give more detailed information on the use of D and R codes for exports and imports of waste, in addition to the overview of the use of D and R codes presented in table 5.

(a) Use of D and R codes in 2010

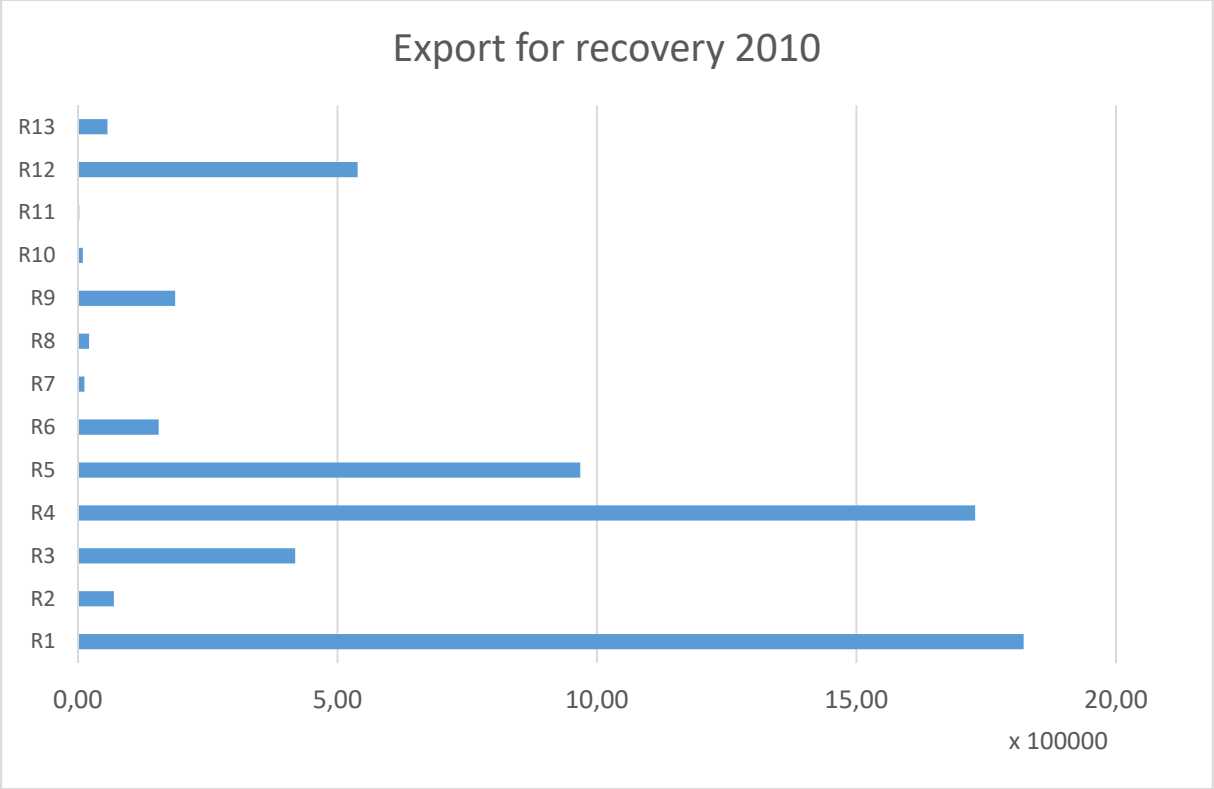
30. Figure 5 shows that in 2010 no exports destined for D2, D4, D7 and D11 operations have been reported. Most reported exports were destined for incineration (D10) or landfilling (D 1 and D5) followed by chemical-physical treatment (D9).

Figure 5: Use of D codes in the reporting year 2010 for waste exported



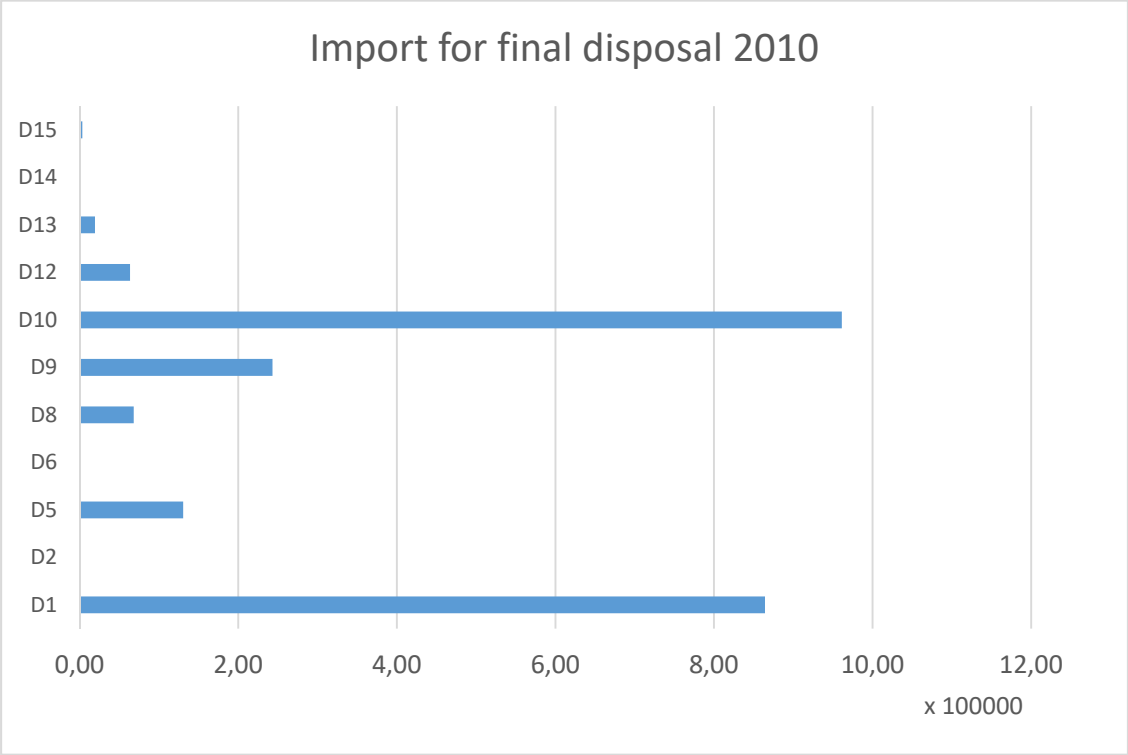
31. Figure 6 shows that, contrary to D-codes, all R-codes are used in reporting exports. Exports for recovery R1 is most used, followed by R4 and R5.

Figure 6: Use of R codes in the reporting year 2010 for waste exported



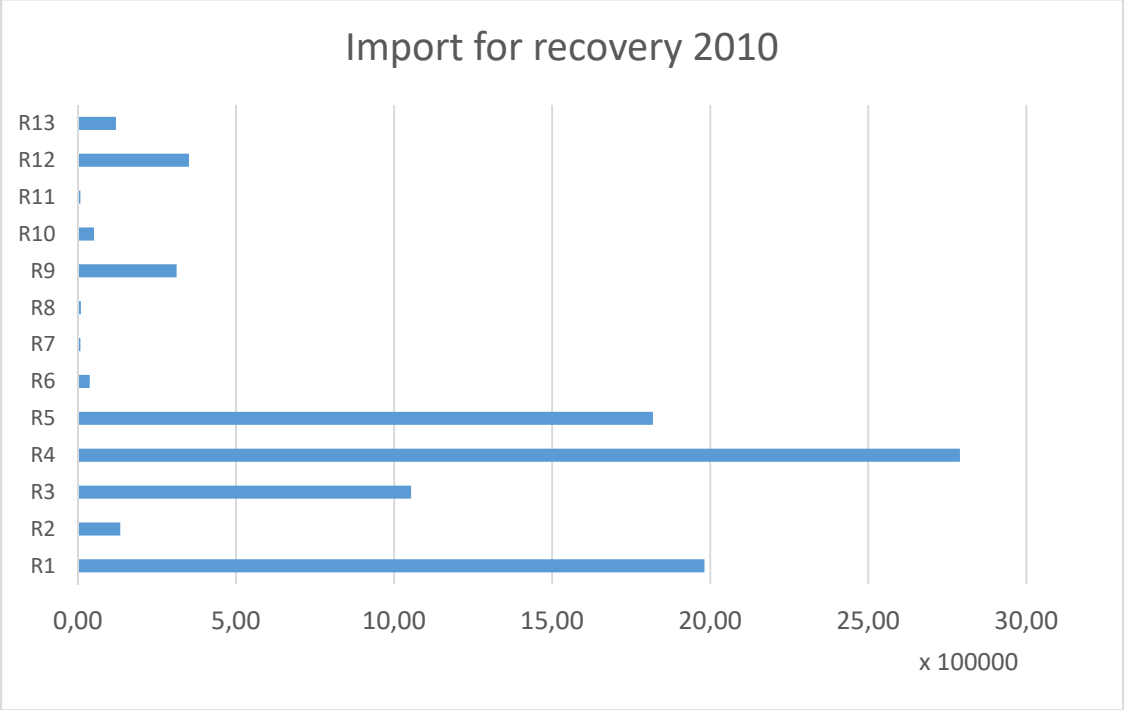
32. Figure 7 shows that imports for final disposal reported in the year 2010 are mainly for the following disposal technologies: incineration (D10) or landfilling (D1), followed by D9.

Figure 7: Use of D codes in the reporting year 2010 for waste imported



33. Figure 8 shows that, with respect to imports of waste destined for recovery, R4 is the most used recovery techniques, followed by R1 and R5.

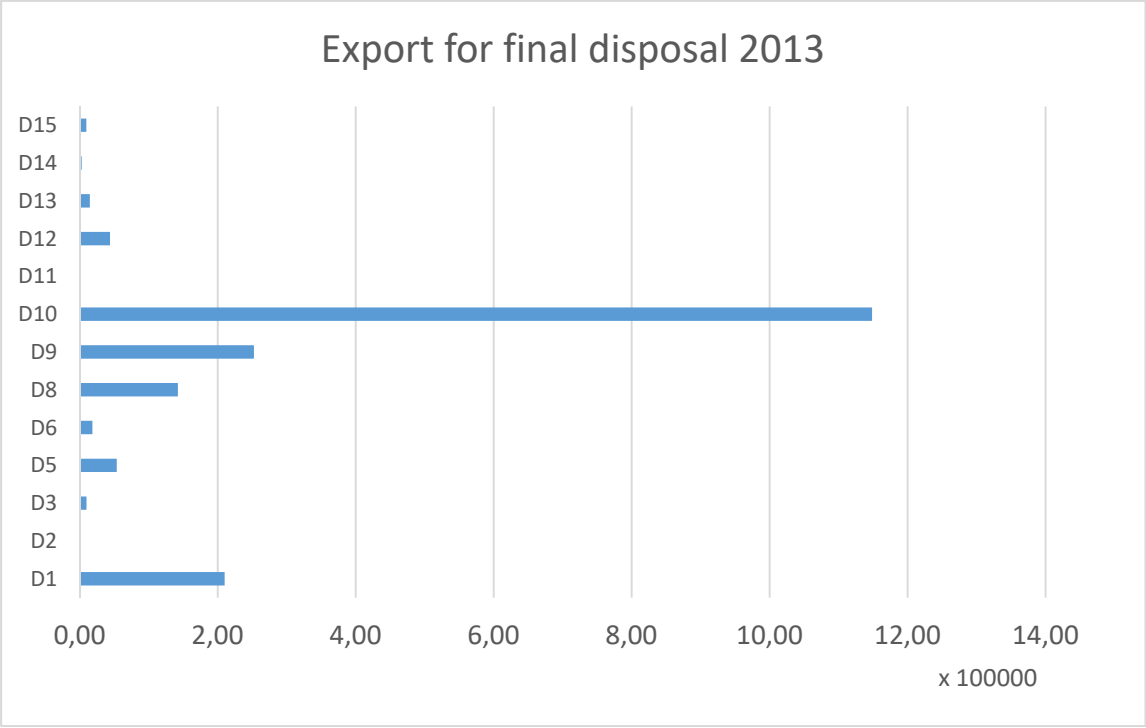
Figure 8: Use of R codes in the reporting year 2010 for waste imported



(b) Use of D and R codes in 2013

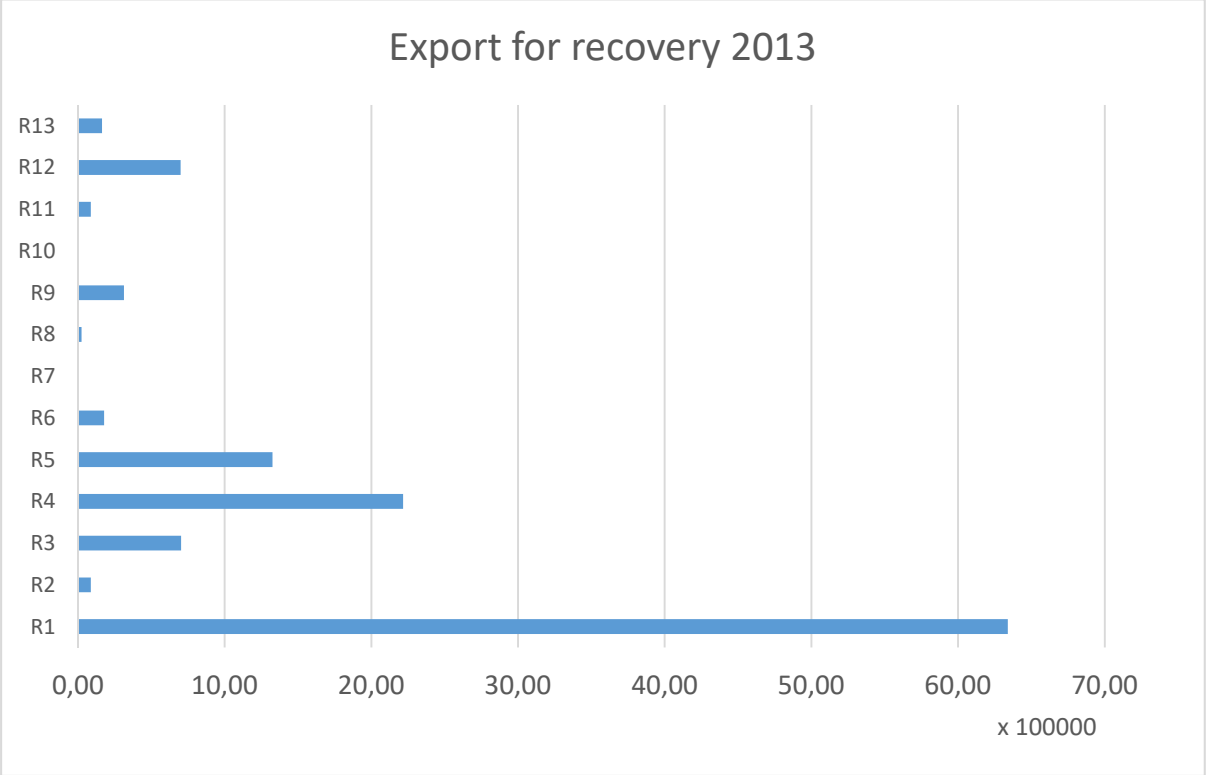
34. Figure 9 shows that, in the reporting year 2013, most waste exported for final disposal was destined for incineration (D10), followed by D9 and D1.

Figure 9: Use of D codes in the reporting year 2013 for waste exported



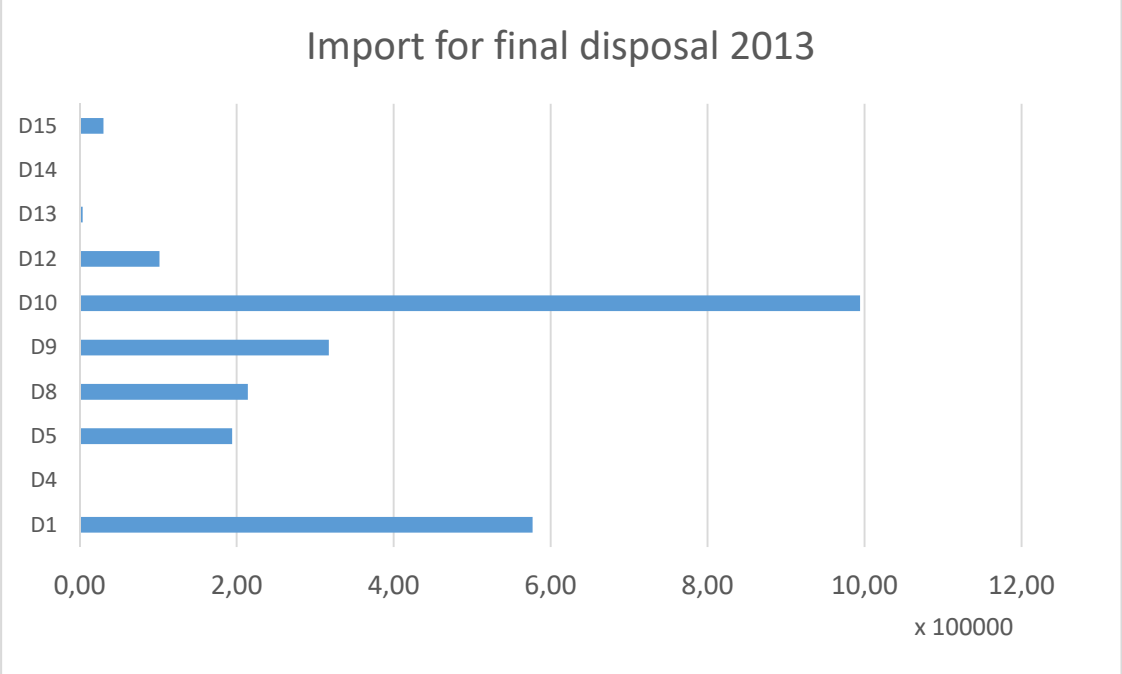
35. Regarding recovery operations, most waste exported was destined for energy recovery (R1) followed by R4 and R5.

Figure 10: Use of R codes in the reporting year 2013 for waste exported



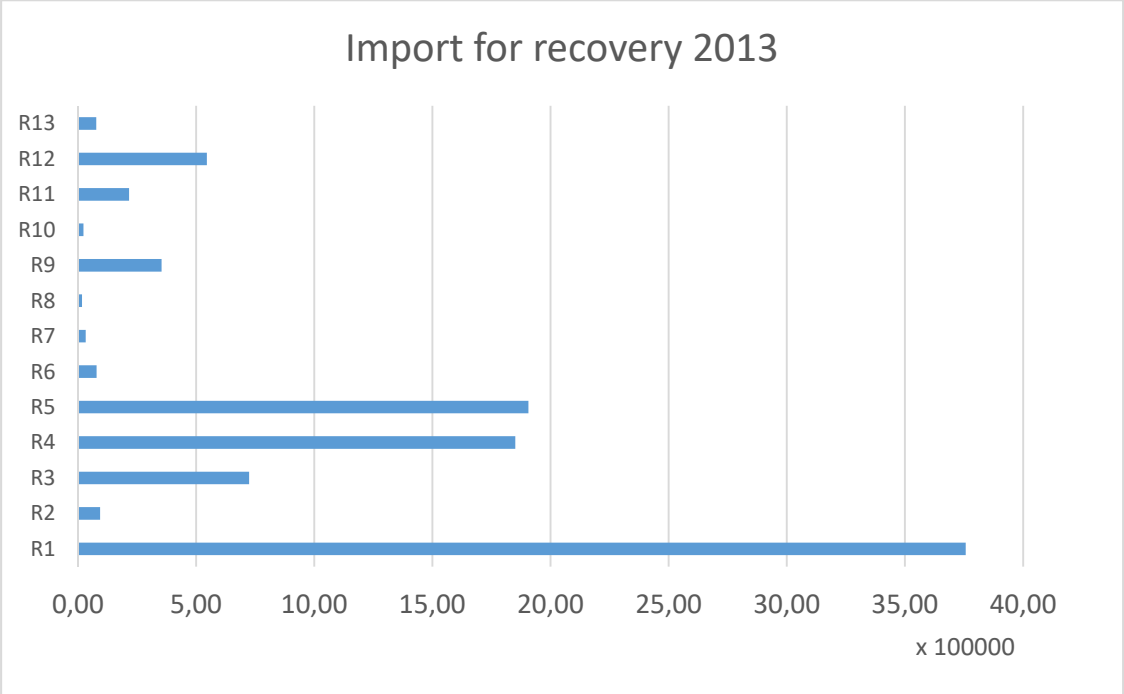
36. Reports of waste imports for 2013 show that the most used technique for final disposal is incineration (D10) followed by landfilling (D1) as in 2010.

Figure 11: Use of D codes in the reporting year 2013 for waste imported



37. Concerning imports for recovery in the reporting year 2013, the situation has changed compared with 2010. In 2013 the most use technique is energy recovery (R1) followed by R5 and R4.

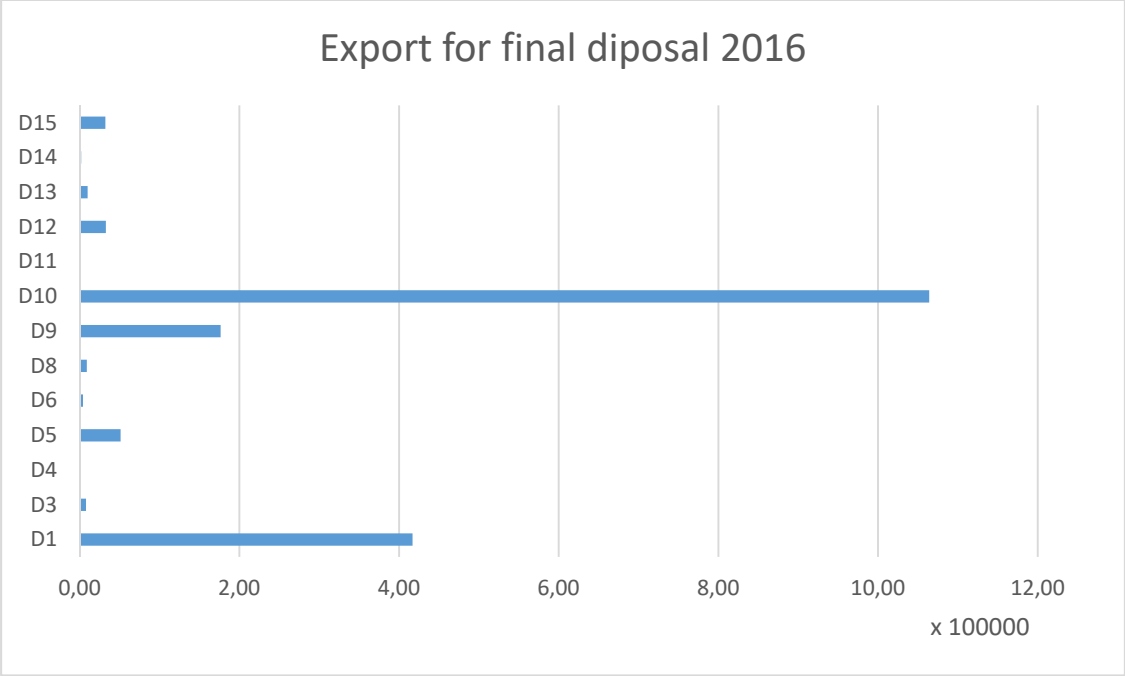
Figure 12: Use of R codes in the reporting year 2013 for waste imported



(c) Use of D and R codes in 2016

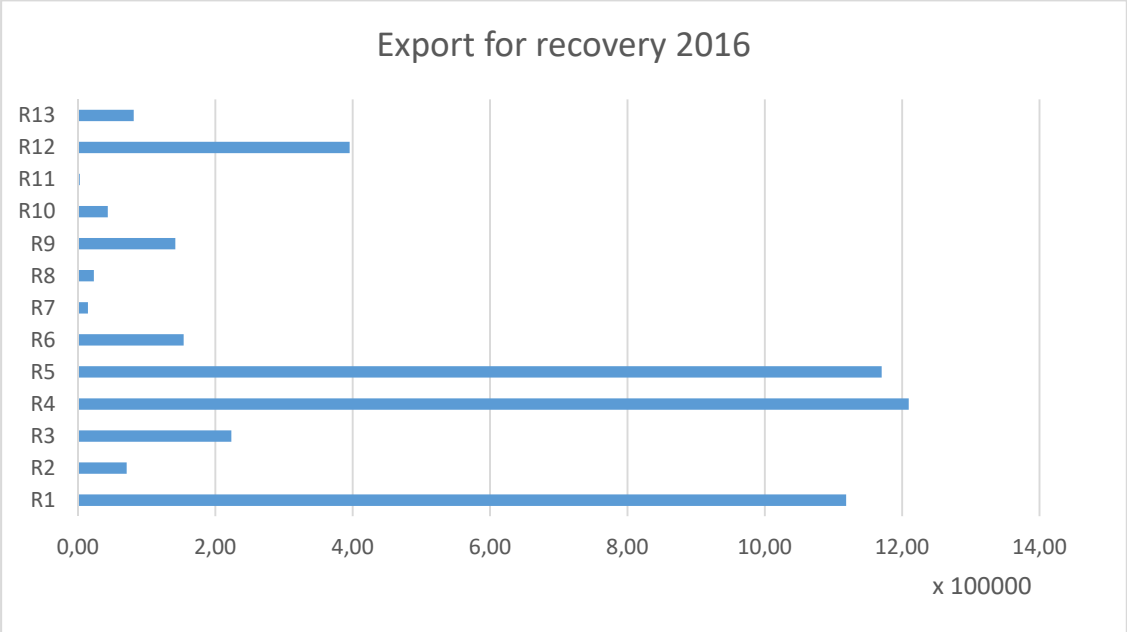
38. As in 2010 and 2013, most of the waste exported in 2016 for final disposal has been destined for incineration (D10) and landfilling (D1).

Figure 13: Use of D codes in the reporting year 2016 for waste exported



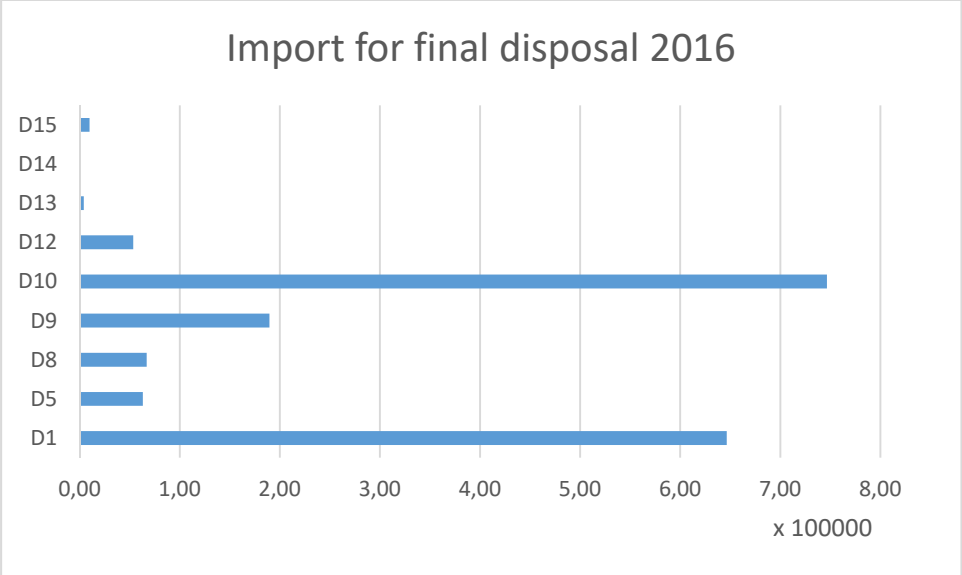
39. Concerning imports for recovery in the reporting year 2016, the situation has changed compared with 2013 and 2010. In 2016 the majority of waste exported was destined for R4 and R5 operations, followed by R1. The use of D11 appears to be a typing error.

Figure 14: Use of R codes in the reporting year 2016 for waste exported



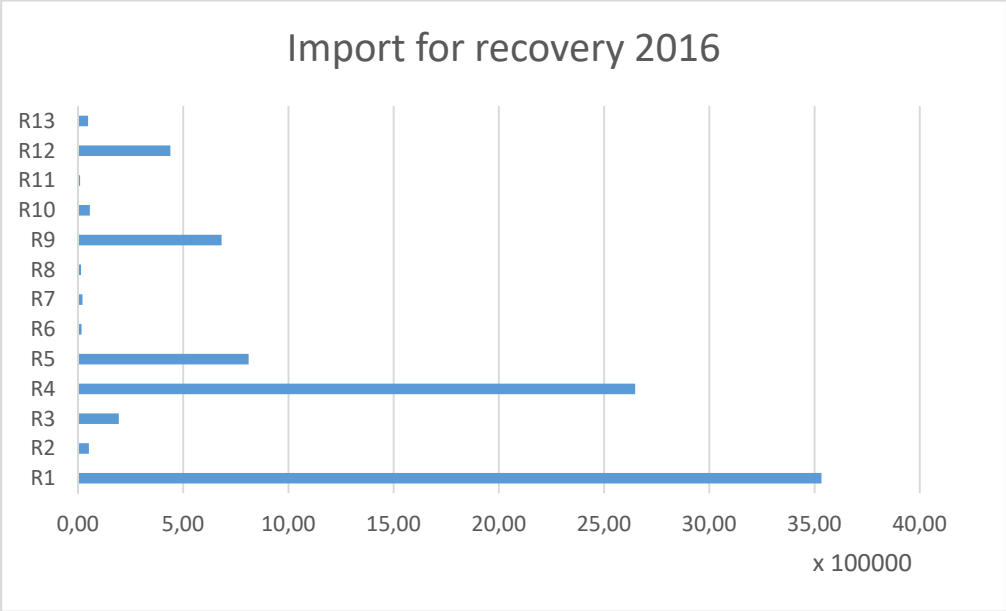
40. Concerning the waste imported for final disposal in 2016, the pattern did not change much compared with 2013 and 2010. The techniques mainly used are incineration and landfilling followed by D9.

Figure 15: Use of D codes in the reporting year 2016 for waste imported



41. As shown in figure 16, most reported imports of waste in 2016 are destined for R 1 followed by R4 and R5.

Figures 16: Use of R codes in the reporting year 2016 for waste imported



(d) Use of D and R codes in 2010, 2013 and 2016

42. Figures 5, 9 and 13 on the export of waste for final disposal and figures 7, 11 and 15 on the import of waste for final disposal, as summarized in the tables below, clearly show that incineration (D10) and landfilling (D1/D5) are the most common operations followed by chemical physical treatment (D9).

43. Figures 6, 10 and 14 on the export of waste for recovery and figures 8, 12 and 16 on the import of waste for recovery, as summarized in the tables below show that energy recovery (R1) is the most common operation used, followed by metal recycling (R4) and recycling of inorganic substances (R5).

Table 18: Use of D codes in the three reporting years

	Export			Import		
	2010	**2013**	**2016**	**2010**	**2013**	**2016**
D1	474134,96	210159,46	416872,45	864396,71	577068,43	646538,08
D2[*)]	0	80,00	0	82,02	0	0
D3	4426,02	9919,67	7864,44	0	0	0
D4[**)]	0	0	12,56	0	31,78	0
D5	190525,76	53758,41	51252,38	130438,74	194203,04	63039,87
D6[***)]	673,64	18425,00	4001,00	72,00	0	0
D7	0	0	0	0	0	0
D8	15052,39	142228,46	8862,56	68201,07	214224,26	66844,97
D9	450735,33	252555,32	176504,92	243224,06	317367,43	189639,64
D10	814774,99	1148507,94	1064159,57	961248,71	994410,61	746565,84
D11[#)]	0	137,06	7,22	0	0	0
D12	105419,00	43844,44	32809,69	63527,40	101553,95	53468,29
D13	16835,47	14645,35	9897,64	19226,71	3773,65	4020,95
D14	7793,27	2783,82	1940,55	1437,88	224,66	182,18
D15	831,50	9594,62	32137,08	3243,21	30201,26	9800,16

*) used in combination with D5 or D5/D9 – probably D9 is the major treatment
**) typing error (D5 or D10 meant)
***) typing error (probably D10 meant)
#) typing error (D1 meant)

44. If the corrections explained in the footnotes in table 18 are included in an analysis of the D operations, a new image results for the use of the D codes whereby the codes D2, D4, D7 and D11 are not used.

Table 19: Use of R codes in the three reporting years

	Export			Import		
	2010	**2013**	**2016**	**2010**	**2013**	**2016**
R1	1822071,18	6338903,84	1118387,35	1981752,78	3757295,03	3532665,29
R2	69053,23	87727,79	70801,67	133674,25	93720,32	51850,63
R3	418601,86	703557,67	223345,53	1053601,61	724610,99	193996,78
R4	1728718,56	2216110,25	1209610,08	2789975,81	1850699,95	2647397,44
R5	967969,76	1325900,18	1170057,11	1819140,74	1906549,82	811031,64
R6	155612,24	178420,70	153790,15	36993,76	78582,18	16734,90

	Export			Import		
	2010	2013	2016	2010	2013	2016
R7	12465,68	6765,44	14604,98	7579,54	32698,12	21151,60
R8	21490,11	24783,91	23230,91	9325,70	17101,27	15014,09
R9	187134,84	313351,21	141805,02	311827,87	353669,56	682732,11
R10	9273,03	2799,40	43514,79	50705,79	23102,66	56369,35
R11	2468,18	88105,28	2589,61	7839,94	216269,38	10016,54
R12	538767,60	699246,98	395481,11	351152,22	545648,40	439383,13
R13	56748,63	163805,90	81139,79	120366,28	77263,40	48077,43

2.7 Final disposal and recovery codes used in export and import according to the waste streams (Y-codes)

45. As previously mentioned, the Y codes set out in Annex I to the Convention have mainly been used in 2010, 2013 and 2016. This section of the report provides information on exports and imports of wastes according to their stream. The following section of the report provides information on the use of A codes, as set out in Annex VIII to the Convention.

46. The figures below have been compiled to present the use of the R and D codes for each reporting year for the waste streams (Y codes) set out in Annex I to the Convention and for their imports and exports. The evaluations were carried out based on the quantities of waste shipped. For each individual R or D code, the quantities shipped are also shown in relation to the waste stream.

47. The figures show that a variety of waste streams are destined for incineration (D10), while specific waste streams such as asbestos (Y36) are landfilled, and that a variety of waste streams are destined for energy recovery (R1), with household waste (Y46) being a predominant stream. In particular, lead (Y31), copper (Y22) or zinc (Y23) are shipped for metal recycling (R4). Significant waste streams in the recycling of inorganic substances are incineration ashes (Y47), or inorganic fluorides (Y32) or cyanides (Y33).

Figure 17: Export in the year 2010 according to waste streams and final disposal operations [in Mg]

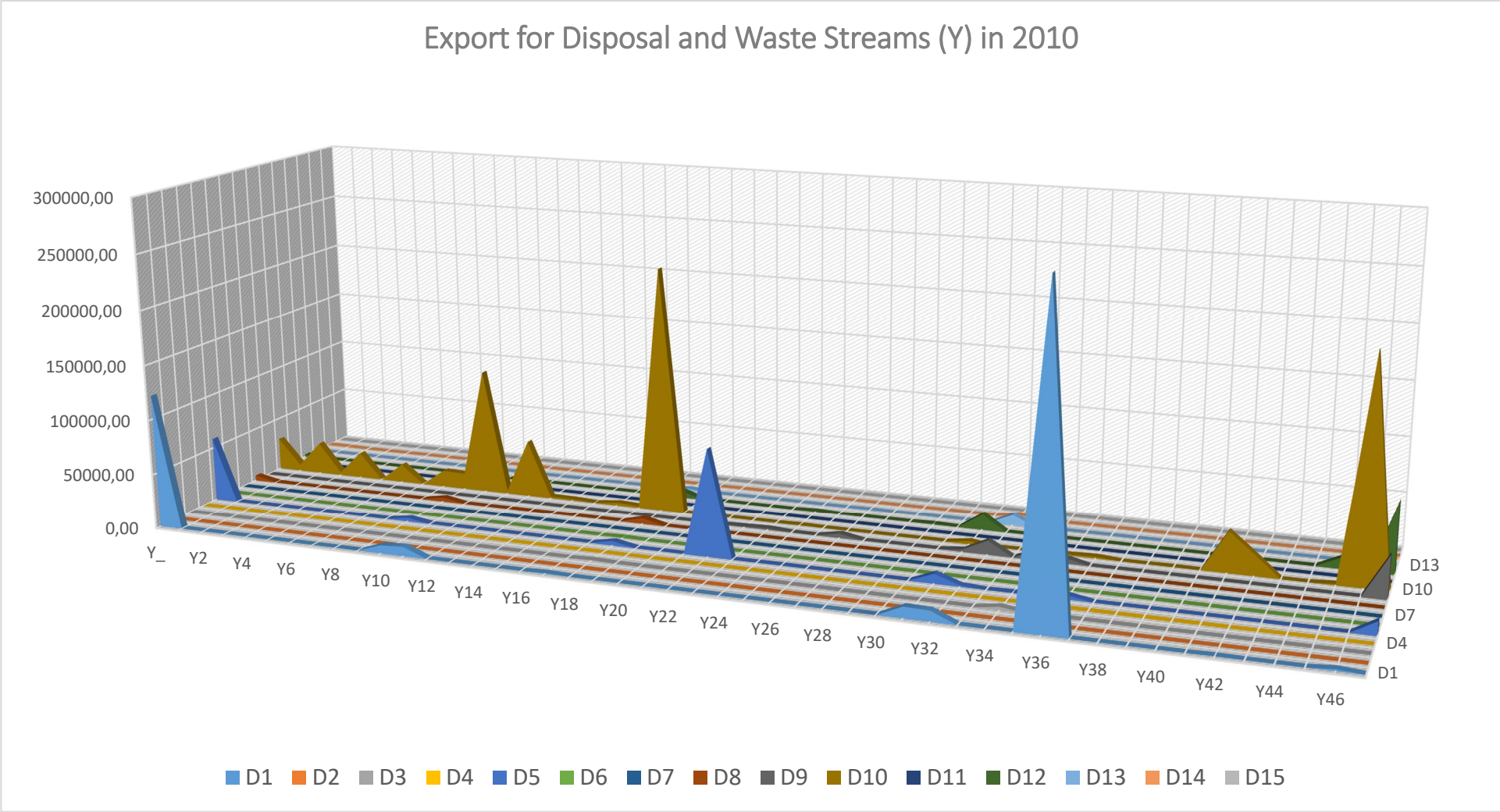


Figure 18: Export in the year 2010 according to waste streams and recovery operations [in Mg]

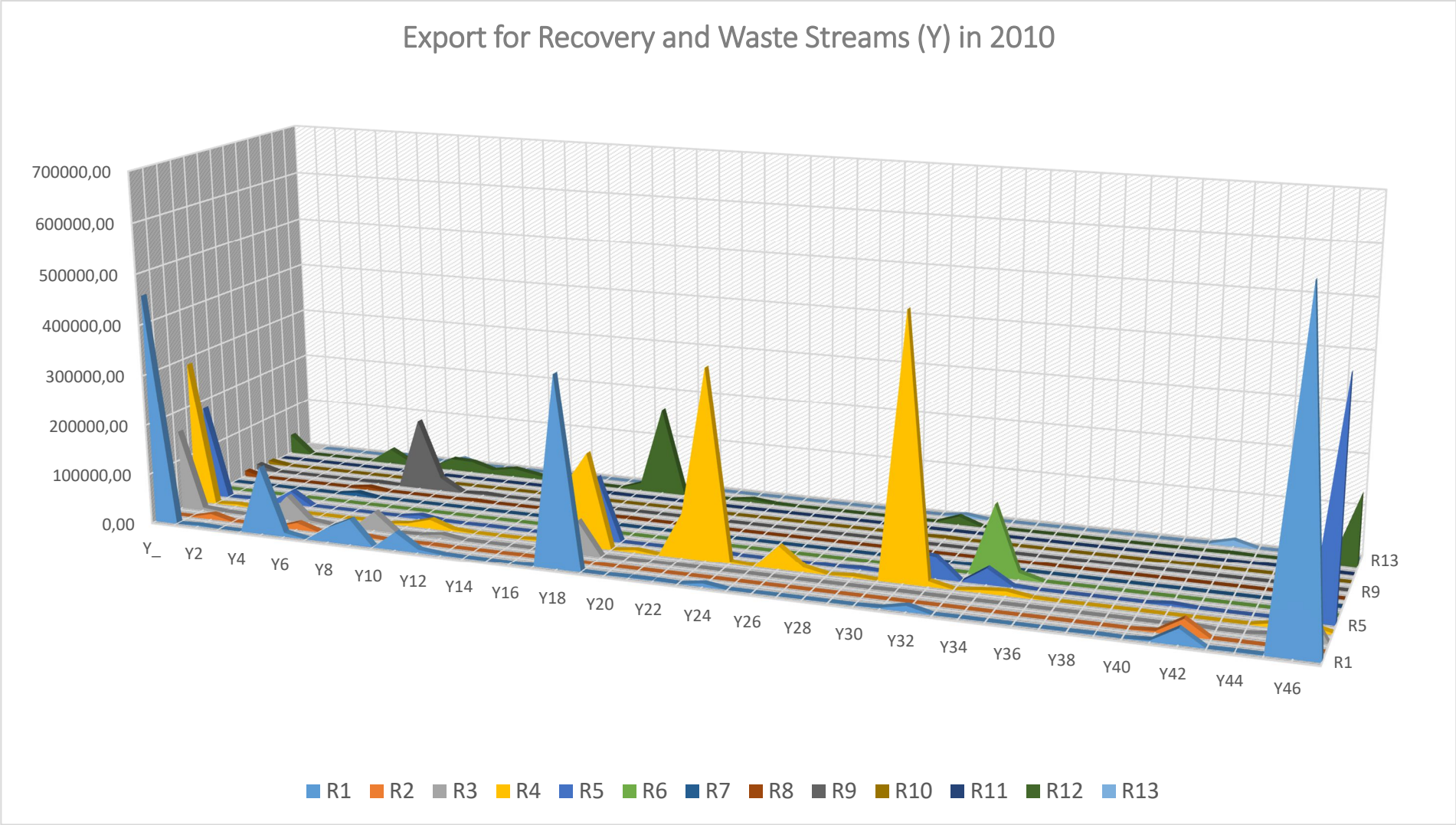


Figure 19: Import in the year 2010 according to waste stream and final disposal operations [in Mg]

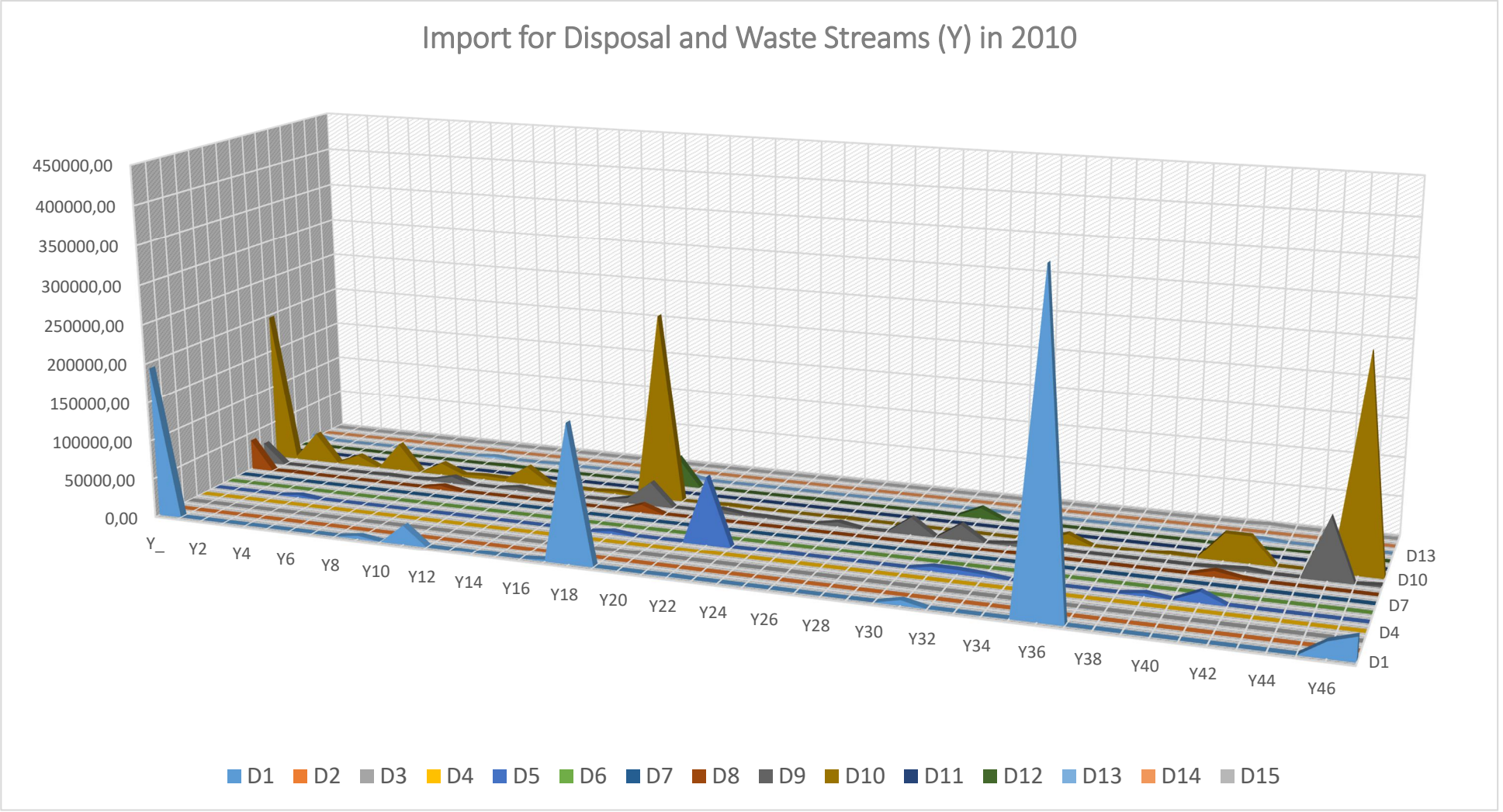


Figure 20: Import in the year 2010 according to waste stream and recovery operations [in Mg]

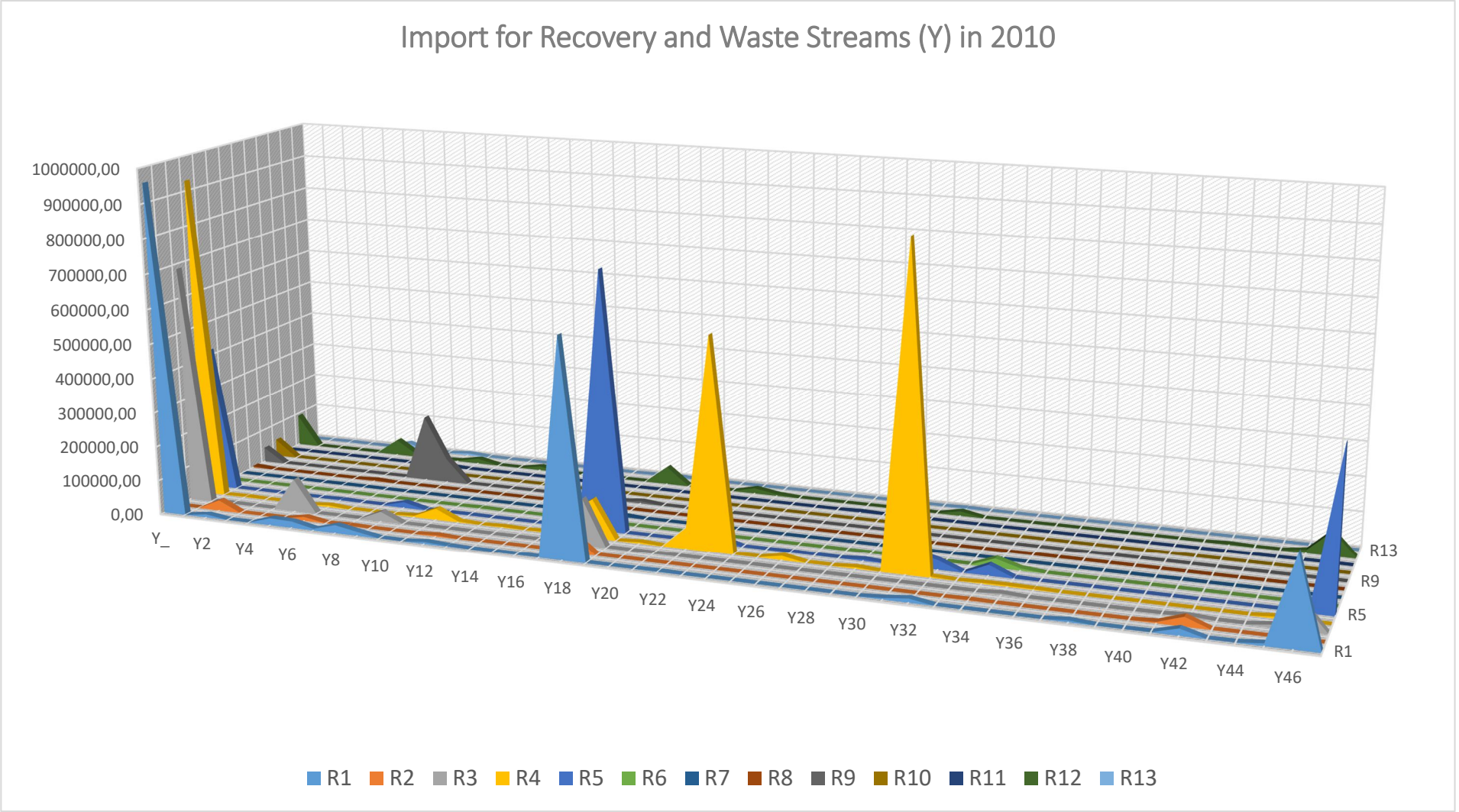


Figure 21: Export in the year 2013 according to waste streams and final disposal operations [in Mg]

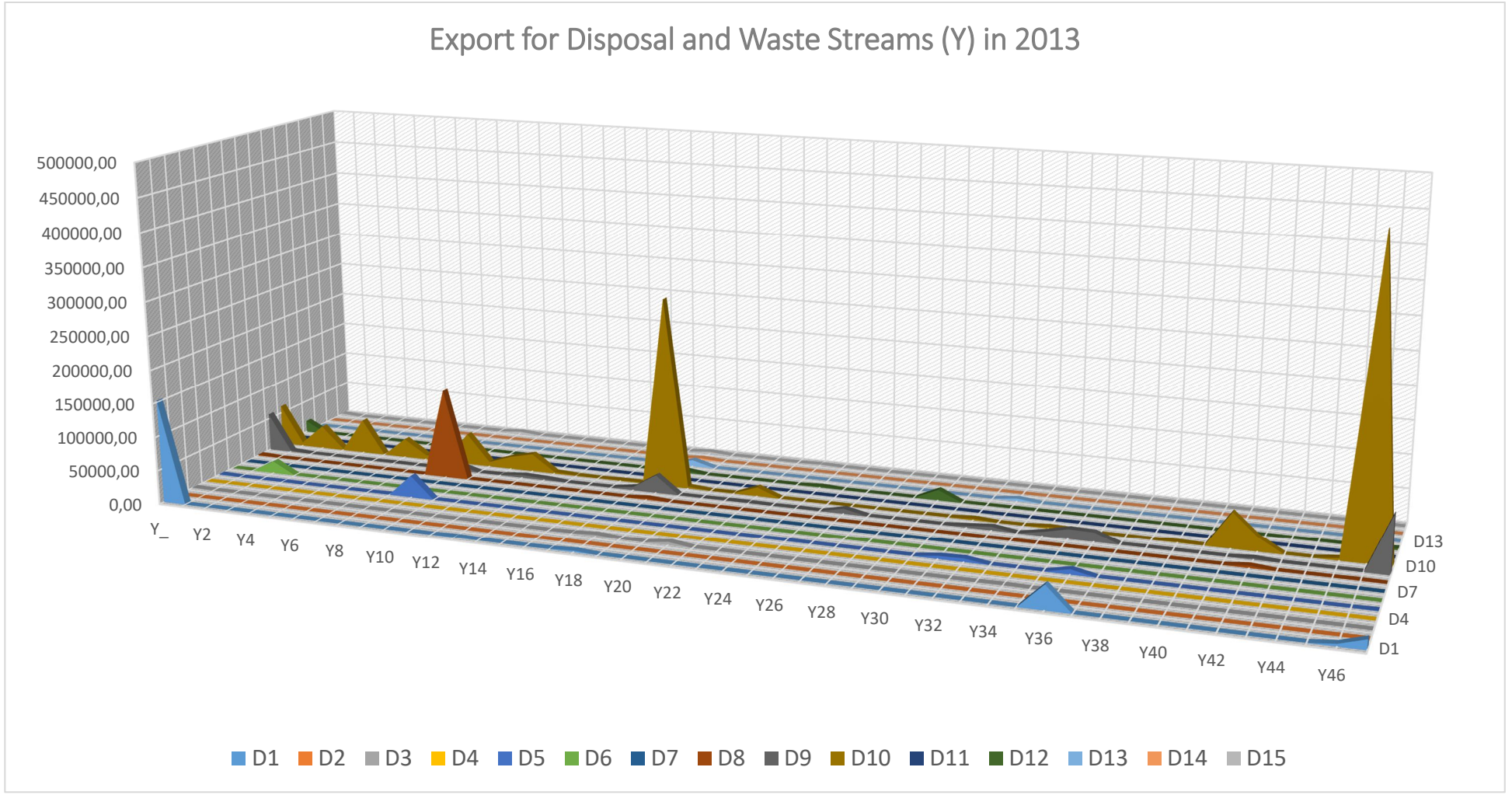


Figure 22: Export in the year 2013 according to waste streams and recovery operations [in Mg]

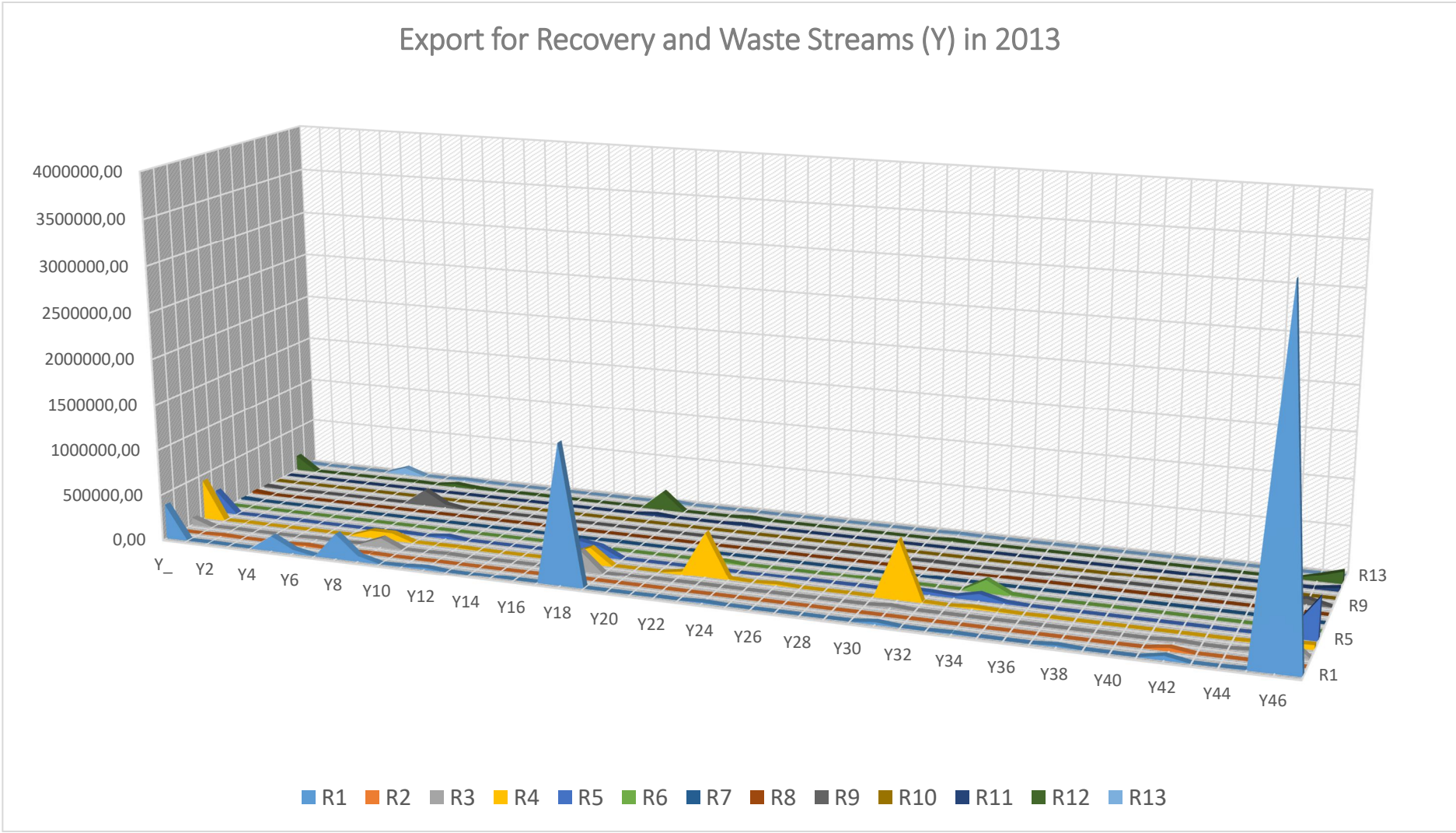


Figure 23: Import in the year 2013 according to waste stream and final disposal operations [in Mg]

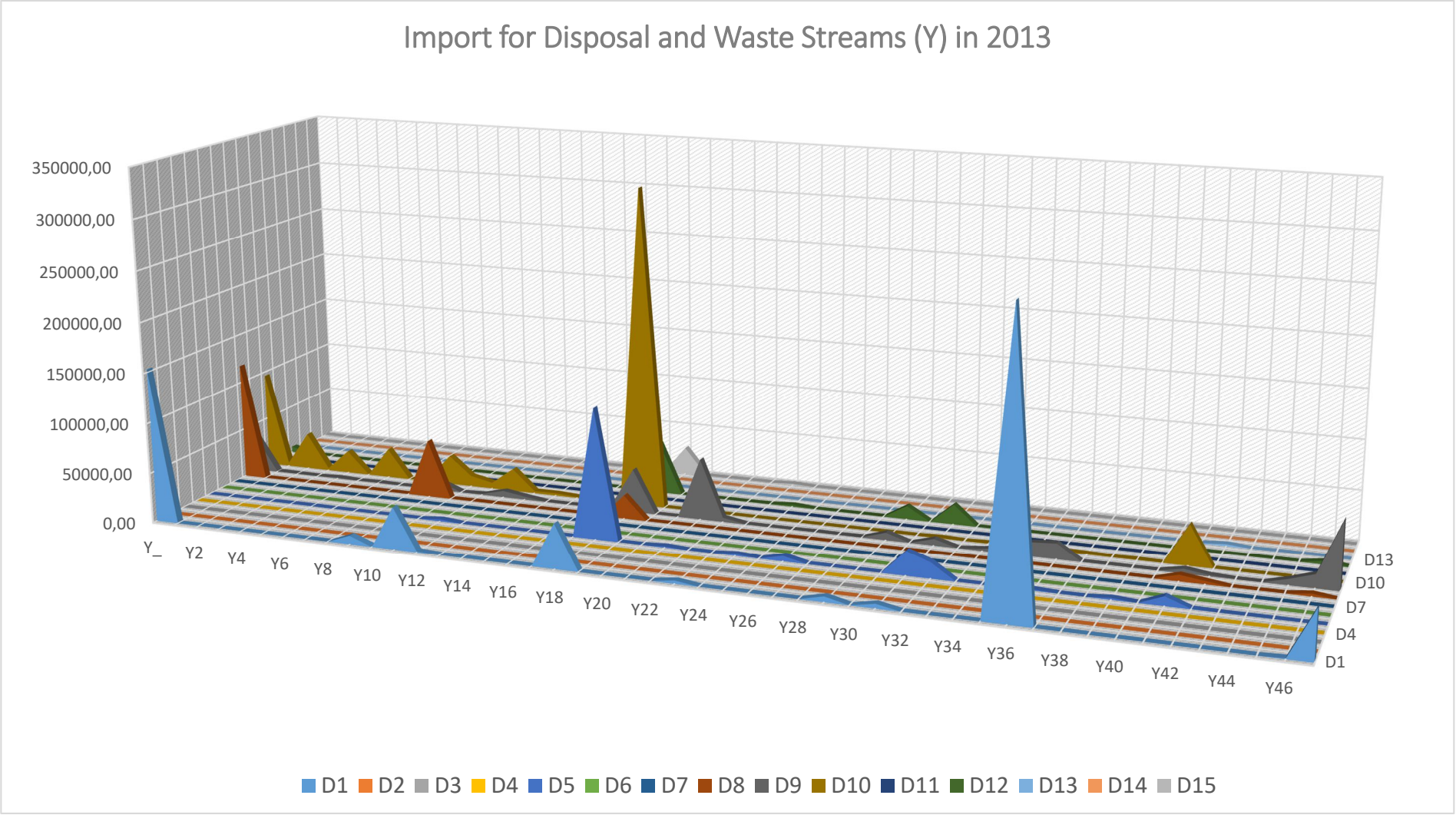


Figure 24: Import in the year 2013 according to waste stream and recovery operations [in Mg]

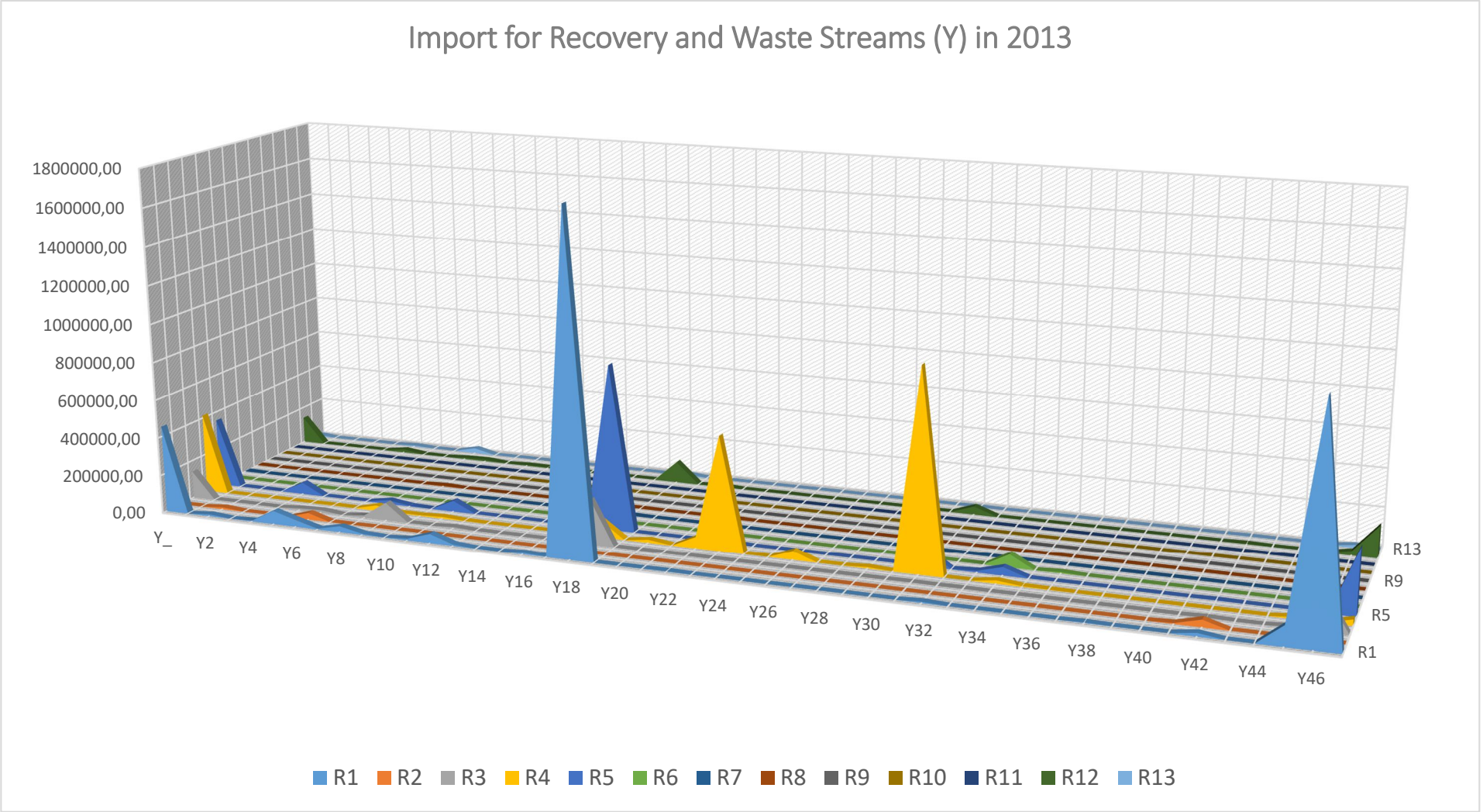


Figure 25: Export in the year 2016 according to waste streams and final disposal operations [in Mg]

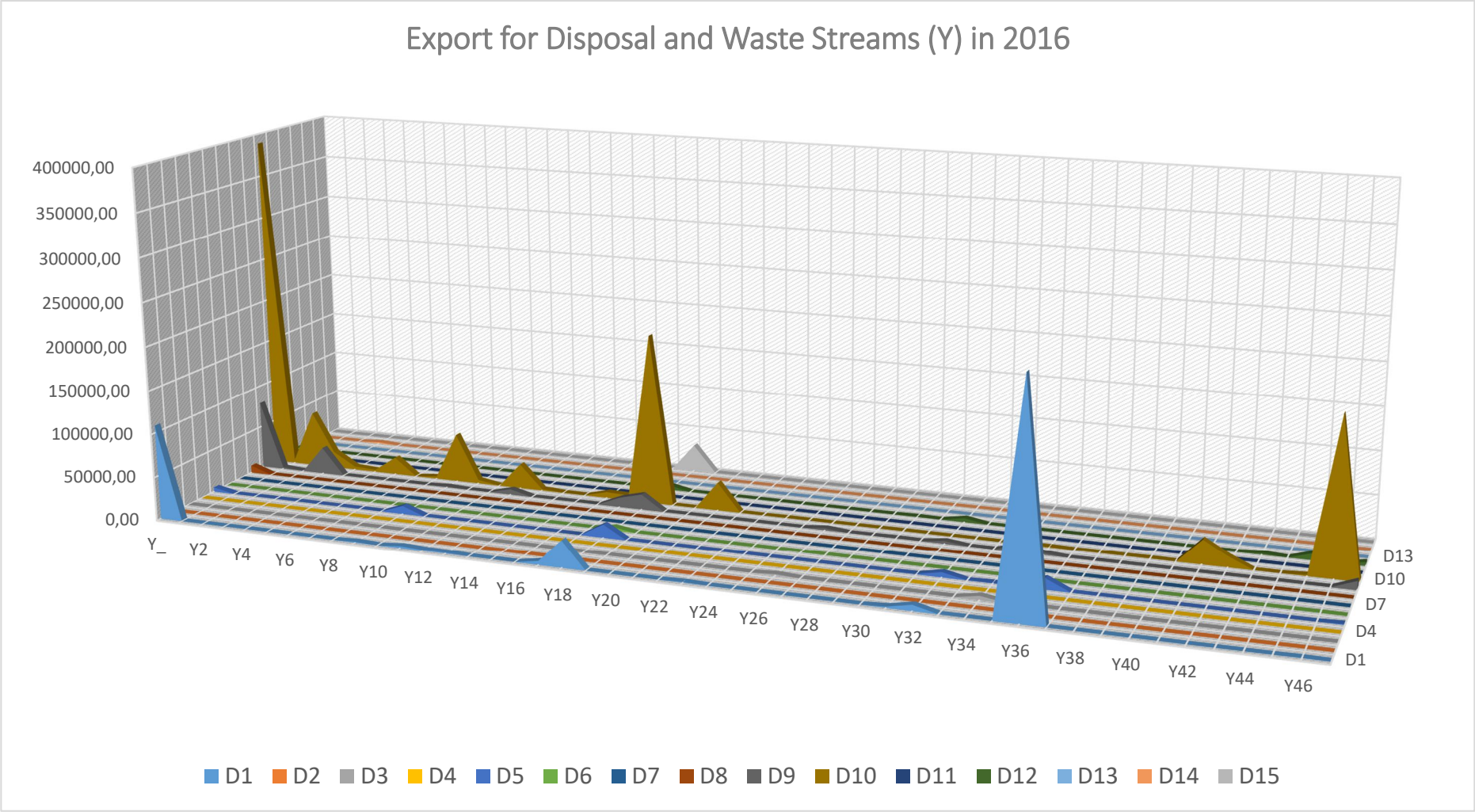


Figure 26: Export in the year 2016 according to waste streams and recovery operations [in Mg]

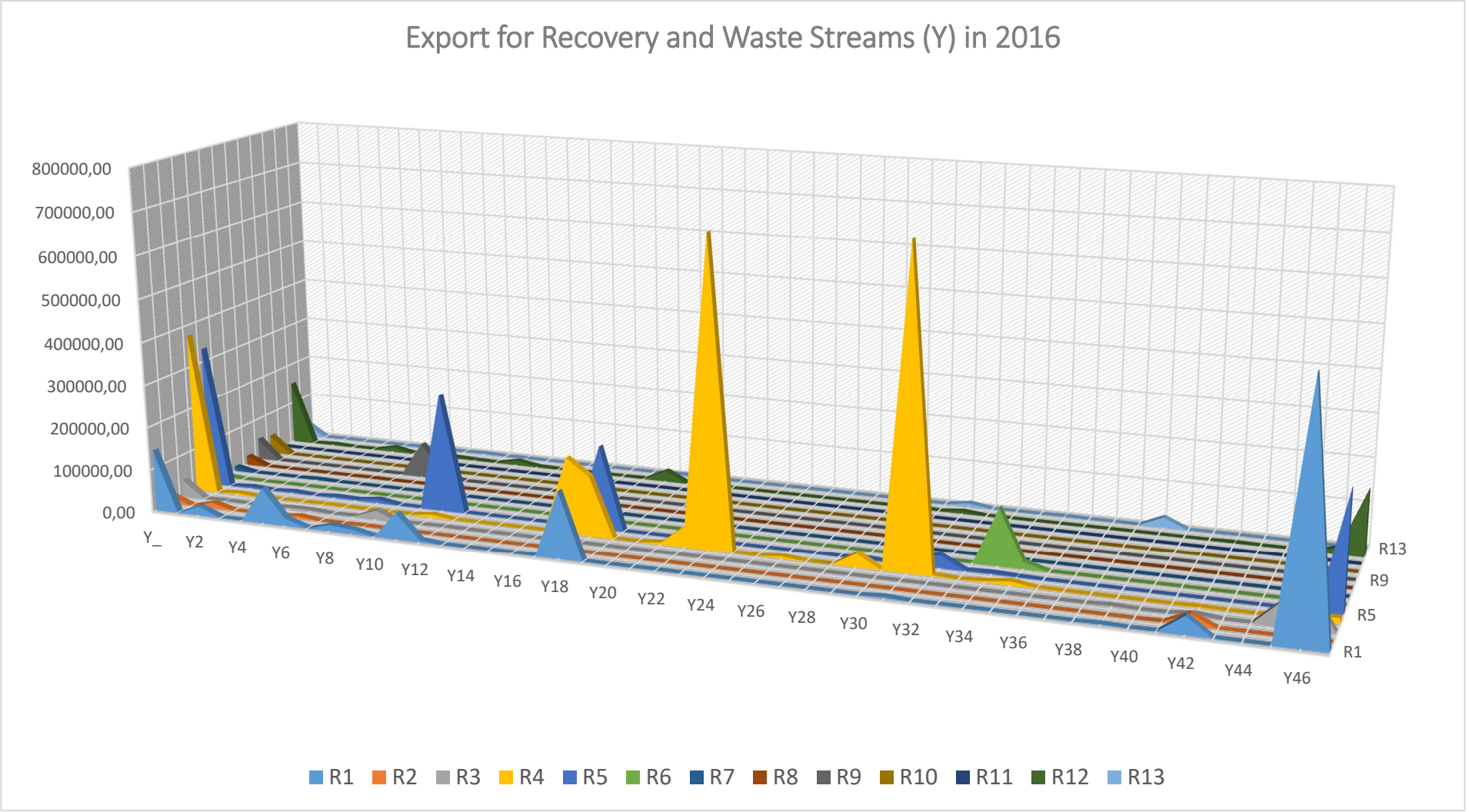


Figure 27: Import in the year 2016 according to waste stream and final disposal operations [in Mg]

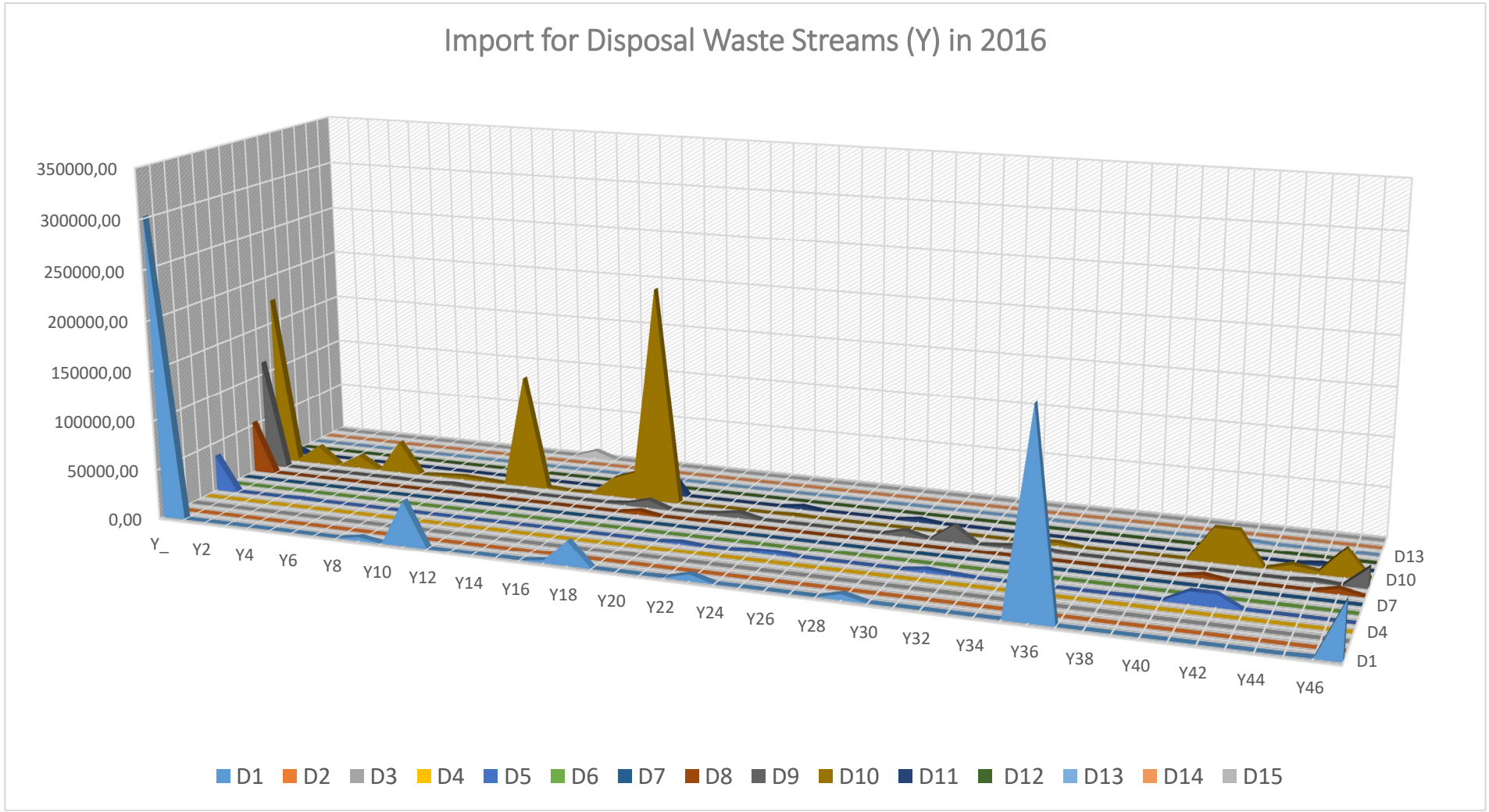
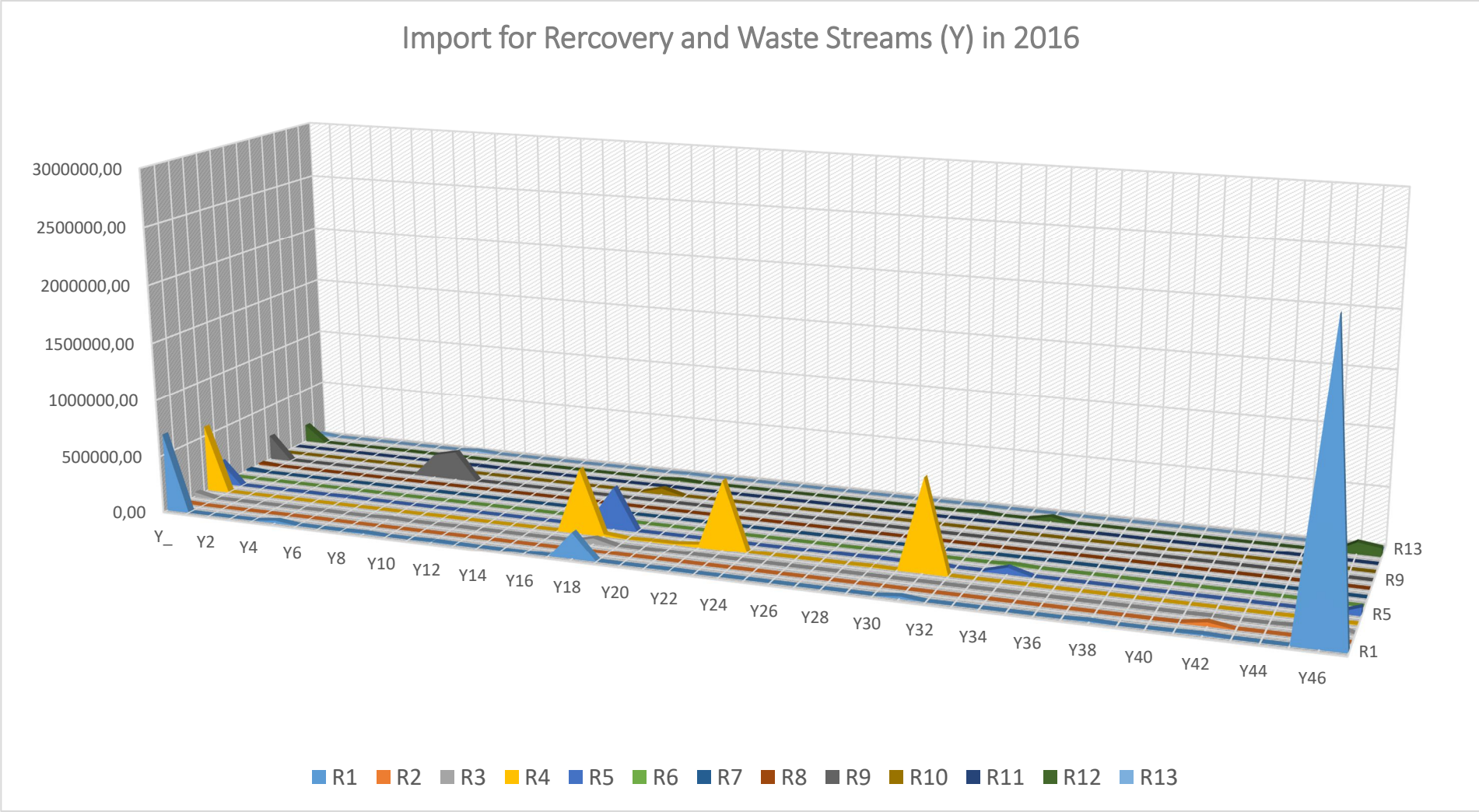


Figure 28: Import in the year 2016 according to waste stream and recovery operations [in Mg]



48. Information on the exported or imported waste stream (Y codes) for each disposal operation is set out in tables 44 to 51 in the annex to the present report. The tables, which consists of individual tables for the respective disposal operations, show both the waste streams and their quantity for a given disposal operation.

2.8 Final disposal and recovery codes used in export and imports according to the waste codes (Annex VIII)

49. The figures 29 to 32 below provide information on the final disposal and recovery codes used in exports and imports according to the waste codes (A codes) set out in Annex VIII to the Convention. The A codes allow a more precise description of the waste streams than the Y codes.

50. The figures show that, when exporting waste for final disposal, the export of asbestos waste (A2050) to landfill (D1) outweighs all other waste streams shipped. Similarly to the review of the Y codes, a variety of waste streams are exported for chemical physical treatment (D9) and for incineration (D10). The figures also show that, when importing waste for final disposal, predominant operations are D1 and D10 followed by D9. The largest waste stream destined for D1 is asbestos waste (A2050).

51. With respect to movements of wastes destined for recovery operations, the largest amounts of waste exported are destined for metal recovery (R4), energy recovery (R1) and recycling of inorganic substances (R5). A variety of exported waste streams are destined for such recovery operations. The figures also show that, when importing waste for recovery purposes, the predominant operations are metal recycling (R4), the recycling of inorganic substances (R5) and energy recovery (R1). A variety of waste streams are imported for such purposes.

Figure 29: Export according to waste codes and final disposal operations [in Mg]

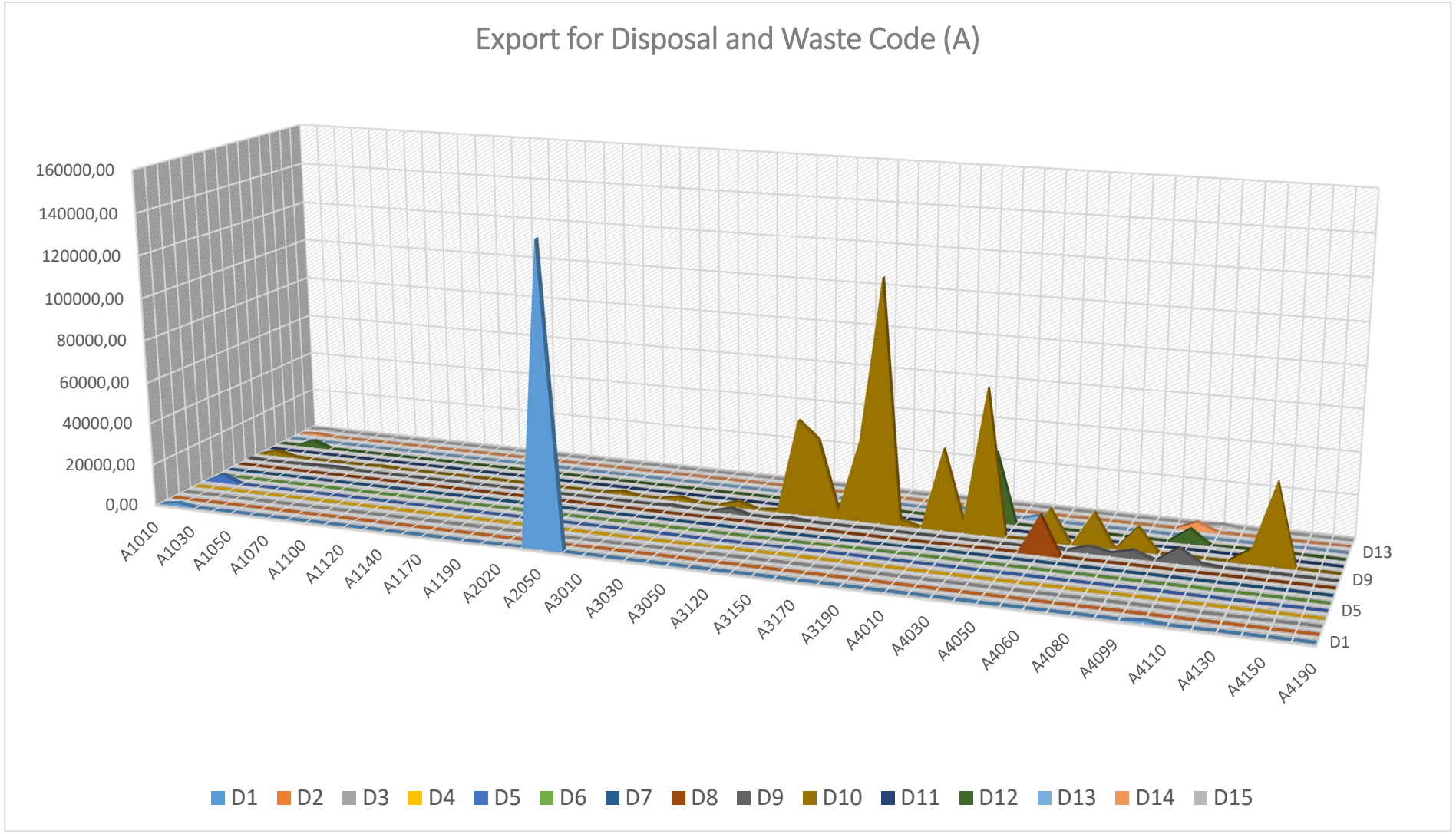


Figure 30: Export according to waste codes and recovery operations [in Mg]

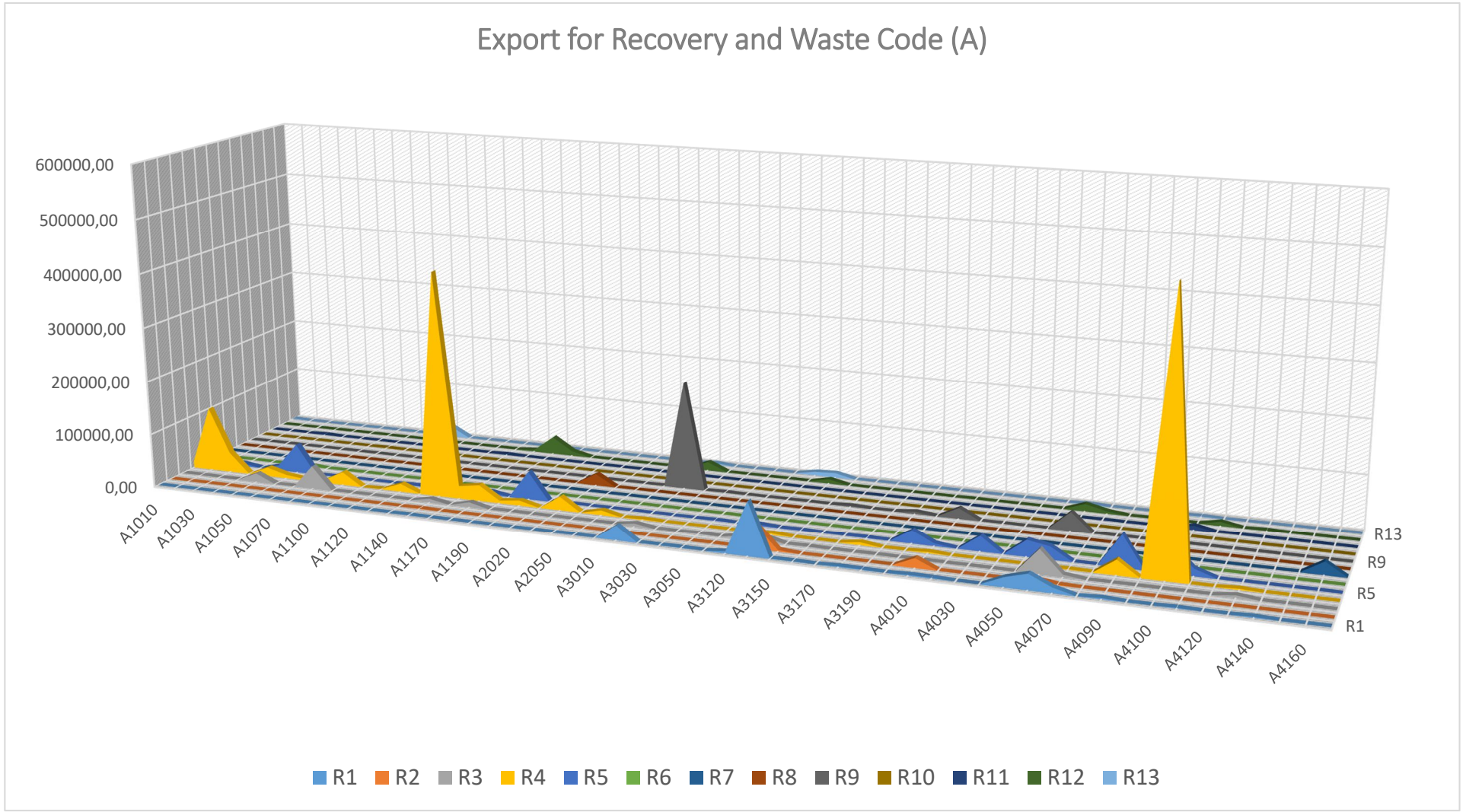


Figure 31: Import according to waste codes and final disposal operations [in Mg]

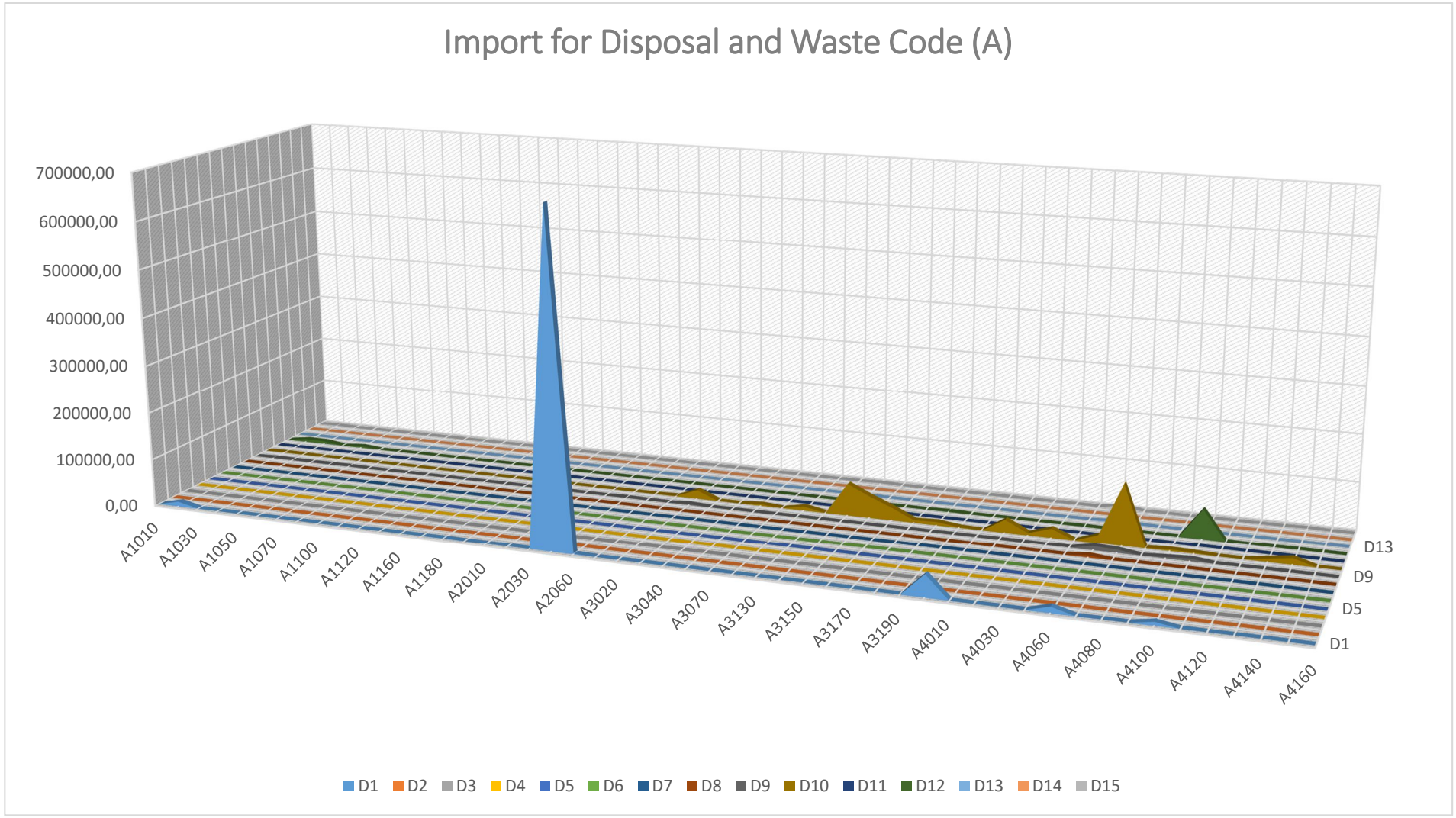
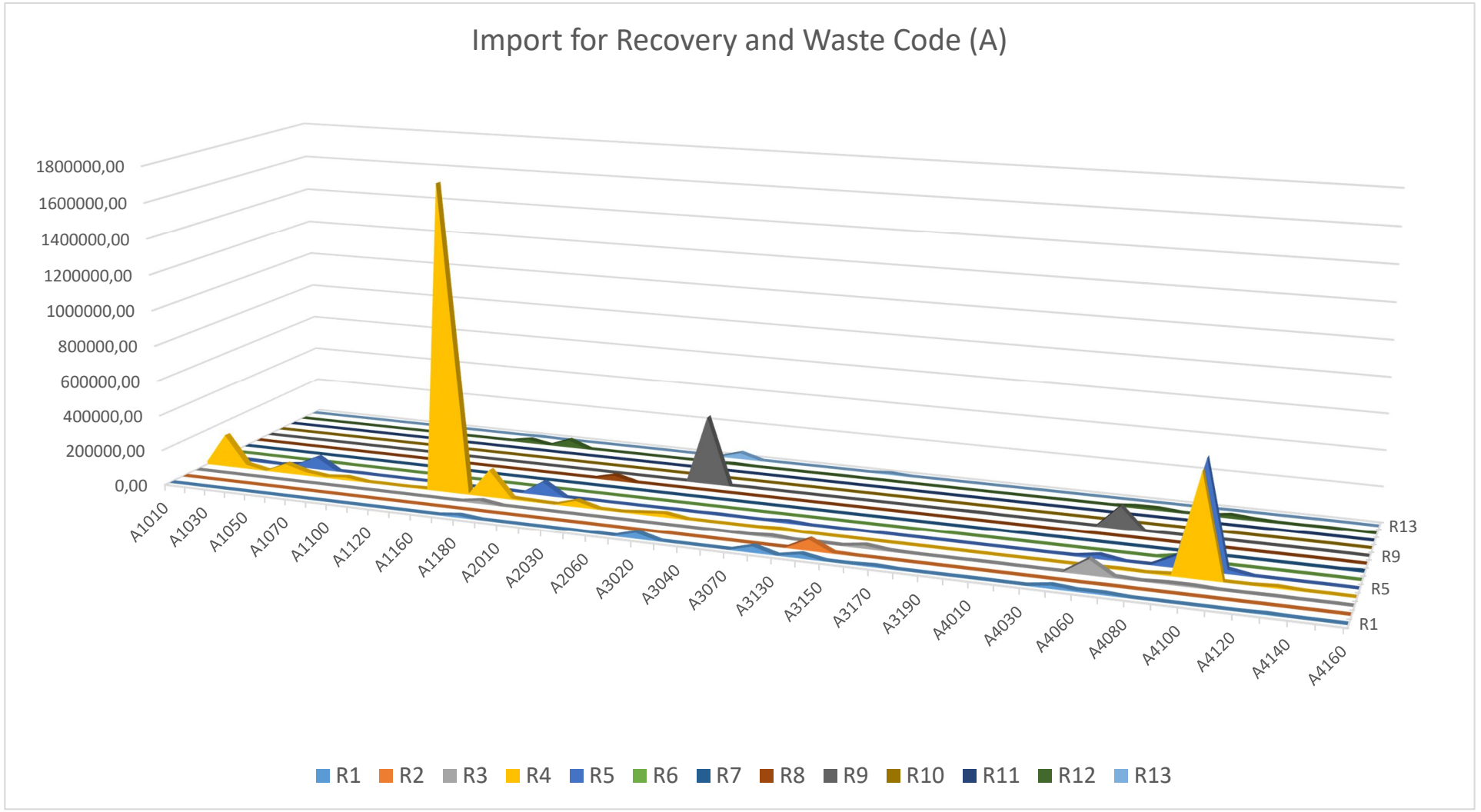


Figure 32: Import according to waste codes and recovery operations [in Mg]



ANNEX

1. **Final disposal and recovery codes used in export and imports for the reporting year 2010**

Table 20: Export in the year 2010 according to waste streams and final disposal operations [in Mg]

Ex 2010	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y_	121288,70				58572,07			4847,69		29737,88		2085,24		580,00	0,09
Y1								432,38		5870,55				491,97	
Y2					2,02			105,85		29407,63				30,10	
Y3										2862,14					61,02
Y4										24217,97					
Y5															
Y6	66,58				35,68					17210,44				83,98	
Y7										54,00		22,55			
Y8								221,80		15582,04					
Y9					3315,00			3997,72		14864,33					263,60
Y10	7416,00									115409,39		105,88		441,92	18,00
Y11	8501,00									3190,14					
Y12										52567,35					17,00
Y13										1865,70					163,00
Y14										1542,39					4,00
Y15										403,12					41,32
Y16										2869,28					
Y17	815,70									1776,98		4175,03			
Y18			821,60		4138,04	673,64		5446,95		226600,89		7263,12	2329,80		2,00
Y19										78,34			0,00		
Y20															
Y21	123,36								548,95	128,33		33,20			

Ex 2010	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y22					96898,00				932,00						
Y23									1527,58	4,34				0,01	
Y24									117,20	437,19		811,76	33,90		
Y25					274,22							34,76			
Y26									4059,04				289,07		64,47
Y27															
Y28															
Y29	140,00								84,00	184,47		622,55			
Y30															
Y31	10065,65				8810,78				2226,39	3108,78		14625,78	35,24		
Y32	9522,39				1270,63				12895,65	58,64			9963,53	3566,00	
Y33										180,77		9,20			
Y34			3271,08		530,23				9937,56	1335,16			6,00		
Y35			333,34		40,00				5352,92	981,23			0,11		175,00
Y36	288148,84				3871,33				70,65	1687,95		112,00			
Y37									42,06	4,04		2,32			
Y38										3,37					
Y39										261,24					
Y40										0,29					
Y41									128,37	37179,03			82,43		
Y42	459,29								33,40	19075,05			160,00		22,00
Y43					43,00										
Y44															
Y45									0,65	1408,87		10683,62		40,00	
Y46	1708,00									202625,70					
Y47					12724,76				38462,11			64832,00		2553,20	

Table 21: Data according to waste streams and export for final disposal in 2010

Ex2010	D1
Y_	121288,70
Y6	66,58
Y10	7416,00
Y11	8501,00
Y17	815,70
Y18	25879,45
Y21	123,36
Y29	140,00
Y31	10065,65
Y32	9522,39
Y36	288148,84
Y42	459,29
Y46	1708,00
Σ	474134,96

Ex2010	D3
Y18	821,60
Y34	3271,08
Y35	333,34
Σ	4426,02

Ex2010	D5
Y_	58572,07
Y2	2,02
Y6	35,68
Y9	3315,00
Y18	4138,04
Y22	96898,00
Y25	274,22
Y31	8810,78
Y32	1270,63
Y34	530,23
Y35	40,00
Y36	3871,33
Y43	43,00
Y47	12724,76
Σ	190525,76

Ex2010	D6
Y18	673,64

Ex2010	D8
Y_	4847,69
Y1	432,38
Y2	105,85
Y8	221,80
Y9	3997,72
Y18	5446,95
Σ	15052,39

Ex2010	D9
Y21	548,95
Y22	932,00
Y23	1527,58
Y24	117,20
Y26	4059,04
Y29	84,00
Y31	2226,39
Y32	12895,65
Y34	9937,56
Y35	5352,92
Y36	70,65
Y37	42,06
Y41	128,37
Y42	33,40
Y45	0,65
Y47	38462,11
Σ	76418,53

Ex2010	D10
Y_	29737,88
Y1	5870,55
Y2	29407,63
Y3	2862,14
Y4	24217,97
Y6	17210,44
Y7	54,00
Y8	15582,04
Y9	14864,33
Y10	115409,39
Y11	3190,14
Y12	52567,35
Y13	1865,70
Y14	1542,39
Y15	403,12
Y16	2869,28
Y17	1776,98
Y18	226600,89
Y19	78,34
Y21	128,33
Y23	4,34
Y24	437,19
Y29	184,47
Y31	3108,78
Y32	58,64
Y33	180,77
Y34	1335,16
Y35	981,23
Y36	1687,95
Y37	4,04
Y38	3,37
Y39	261,24
Y40	0,29
Y41	37179,03
Y42	19075,05
Y45	1408,87
Y46	202625,70
Σ	814775,01

Ex2010	D12
Y_	2085,24
Y7	22,55
Y10	105,88
Y17	4175,03
Y18	7263,12
Y21	33,20
Y24	811,76
Y25	34,76
Y29	622,55
Y31	14625,78
Y33	9,20
Y36	112,00
Y37	2,32
Σ	29903,39

Ex2010	D14
Y_	580,00
Y1	491,97
Y2	30,10
Y6	83,98
Y10	441,92
Y23	0,01
Y32	3566,00
Y41	6,09
Y45	40,00
Y47	2553,20
Σ	7793,27

Ex2010	D15
Y_	0,09
Y3	61,02
Y9	263,61
Y10	18,00
Y12	17,00
Y13	163,00
Y14	4,00
Y15	41,32
Y18	2,00
Y26	64,47
Y35	175,00
Y42	22,00
Σ	831,51

Table 22: Export in the year 2010 according to waste streams and recovery operations [in Mg]

Ex2010	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y_	455440,43	205,51	158204,39	286099,65	182840,33	956,60	132,61	11483,16	12808,87	7411,13	62,00	39498,22	4498,97
Y1		185,88	5335,16	590,92								176,83	0,12
Y2	2083,24	11341,60	1502,89	3535,35	1928,88		60,00	20,00				214,75	900,37
Y3				173,14	108,00							89,69	
Y4	22,38			181,43	28017,60		637,25						
Y5	134762,87		49255,63									30666,70	5631,15
Y6	8212,22	14123,81	5776,79	674,18	88,84		7672,88	6257,75	2247,98			6341,16	2210,21
Y7				85,60									
Y8	29568,65	1094,30	750,46	1423,28	86,96		86,97		142661,63			24005,91	12077,19
Y9	51162,19	3306,59	37790,01	100,00	637,00				26373,87			22100,53	162,75
Y10	1,00			5635,90	8021,10				31,00			9158,78	
Y11	36021,20		1515,30	18544,77	1040,00			1773,39	2814,00			17065,38	333,94
Y12	6729,93	1185,13	7537,61	3422,32	116,29		3,19		96,45	150,00	291,18	9495,01	163,57
Y13	1936,75		844,13	665,29	1000,00							1477,74	
Y14	446,26		51,08	333,90								160,47	
Y15				605,45								866,00	
Y16		1106,17	3,66	3471,31	1818,58		228,30				1125,72	56,00	15,00
Y17	323,91	368,01	2,50	117304,66	20587,67	1183,43			77,90		259,00	16130,96	
Y18	376191,36	1242,78	66959,64	186304,88	126135,10		650,53	1293,34		50,90	642,84	174857,68	6333,31
Y19				27,40				195,93				46,41	
Y20				5506,30									
Y21	1334,00			416,42	406,50								
Y22	1366,00		174,38	88934,28	1414,26							6574,13	18,00
Y23				375230,53	3822,52							1576,15	175,06
Y24	6917,00			3125,48			11,00						
Y25			329,71	7,29									

Ex2010	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y26				46168,15				15,00				372,51	241,89
Y27				9584,17							15,44		
Y28													
Y29			12,88	3261,96	2737,68						52,00	69,15	7,07
Y30													
Y31	1905,28		710,86	514611,84	47934,40			10,00		1661,00		17061,71	6443,58
Y32	11608,80			10520,70	42765,73							43,00	
Y33				42,99									
Y34	482,38		76,08	5522,88	31408,92	140421,48						14,00	53,72
Y35		3,42		8728,65	2453,90	13050,72		419,55				446,00	176,08
Y36		75,57		1356,66	65,00						20,00	213,97	
Y37				101,00									
Y38	300,40											85,95	
Y39	1011,43	414,38	155,00		73,20				23,14				
Y40					87,00		46,00						
Y41	2824,34	3127,60	5,58	39,00	4330,02		471,84					8,80	1087,27
Y42	30254,95	31272,48	3273,59	131,58	889,03		149,76					1601,62	12943,19
Y43													
Y44	960,40												
Y45	960,40		5015,27	9330,76	281,18		563,35					1855,78	437,20
Y46	649138,20		73275,27	14138,54	1500,00			22,00				12629,26	2839,00
Y47	10877,16		44,00	2779,96	455374,06		1752,00					143807,33	

Table 23: Data according to waste streams and export for recovery in 2010

Ex2010	R1
Y_	455440,43
Y2	2083,24
Y4	22,38
Y5	134762,87
Y6	8212,22
Y8	29568,65
Y9	51162,19
Y10	1,00
Y11	36021,20
Y12	6729,93
Y13	1936,75
Y14	446,26
Y17	323,91
Y18	376191,36
Y21	1334,00
Y22	1366,00
Y24	6917,00
Y31	1905,28
Y32	11608,80
Y34	482,38
Y38	300,40
Y39	1011,43
Y41	2824,34
Y42	30254,95
Y44	960,40
Y45	960,40
Y46	649138,20
Y47	10877,16
Σ	1822843,13

Ex2010	R2
Y_	205,51
Y1	185,88
Y2	11341,60
Y6	14123,81
Y8	1094,30
Y9	3306,59
Y12	1185,13
Y16	1106,17
Y17	368,01
Y18	1242,78
Y35	3,42
Y36	75,57
Y39	414,38
Y41	3127,60
Y42	31272,48
Σ	69053,23

Ex2010	R3
Y_	158204,39
Y1	5335,16
Y2	1502,89
Y5	49255,63
Y6	5776,79
Y8	750,46
Y9	37790,01
Y11	1515,30
Y12	7537,61
Y13	844,13
Y14	51,08
Y16	3,66
Y17	2,50
Y18	66959,64
Y22	174,38
Y25	329,71
Y29	12,88
Y31	710,86
Y34	76,08
Y39	155,00
Y41	5,58
Y42	3273,59
Y45	5015,27
Y46	73275,27
Y47	44,00
Σ	418601,87

Ex2010	R4
Y_	286099,65
Y1	590,92
Y2	3535,35
Y3	173,14
Y4	181,43
Y6	674,18
Y7	85,60
Y8	1423,28
Y9	100,00
Y10	5635,90
Y11	18544,77
Y12	3422,32
Y13	665,29
Y14	333,90
Y15	605,45
Y16	3471,31
Y17	117304,66
Y18	186304,88
Y19	27,40
Y20	5506,30
Y21	416,42
Y22	88934,28
Y23	375230,53
Y24	3125,48
Y25	7,29
Y26	46168,15
Y27	9584,17
Y29	3261,96
Y31	514611,84
Y32	10520,70
Y33	42,99
Y34	5522,88
Y35	8728,65
Y36	1356,66
Y37	101,00
Y41	39,00
Y42	131,58
Y45	9330,76
Y46	14138,54
Y47	2779,96
Σ	1728718,57

Ex2010	R5
Y_	182840,33
Y2	1928,88
Y3	108,00
Y4	28017,60
Y6	88,84
Y8	86,96
Y9	637,00
Y10	8021,10
Y11	1040,00
Y12	116,29
Y13	1000,00
Y16	1818,58
Y17	20587,67
Y18	126135,10
Y21	406,50
Y22	1414,26
Y23	3822,52
Y29	2737,68
Y31	47934,40
Y32	42765,73
Y34	31408,92
Y35	2453,90
Y36	65,00
Y39	73,20
Y40	87,00
Y41	4330,02
Y42	889,03
Y45	281,18
Y46	1500,00
Y47	455374,06
Σ	967969,75

Ex2010	R6
Y_	956,60
Y17	1183,43
Y34	140421,48
Y35	13050,72
Σ	155612,23

Ex2010	R7
Y_	132,61
Y2	60,00
Y4	637,25
Y6	7672,88
Y8	86,97
Y12	3,19
Y16	228,30
Y18	650,53
Y24	11,00
Y40	46,00
Y41	471,84
Y42	149,76
Y45	563,347
Y47	1752,00
Σ	12465,677

Ex2010	R8
Y_	11483,16
Y2	20,00
Y6	6257,75
Y11	1773,39
Y18	1293,34
Y19	195,93
Y26	15,00
Y31	10,00
Y35	419,55
Y46	22,00
Σ	21490,12

Ex2010	R9
Y_	12808,87
Y6	2247,98
Y8	142661,63
Y9	26373,87
Y10	31,00
Y11	2814,00
Y12	96,45
Y17	77,90
Y39	23,14
Σ	187134,84

Ex2010	R10
Y_	7411,13
Y12	150,00
Y18	50,90
Y31	1661,00
Σ	9273,03

Ex2010	R11
Y_	62,00
Y12	291,18
Y16	1125,72
Y17	259,00
Y18	642,84
Y27	15,44
Y29	52,00
Y36	20,00
Σ	2468,18

Ex2010	R12
Y_	39498,22
Y1	176,83
Y2	214,75
Y3	89,69
Y5	30666,70
Y6	6341,16
Y8	24005,91
Y9	22100,53
Y10	9158,78
Y11	17065,38
Y12	9495,01
Y13	1477,74
Y14	160,47
Y15	866,00
Y16	56,00
Y17	16130,96
Y18	174857,68
Y19	46,41
Y22	6574,13
Y23	1576,15
Y26	372,51
Y29	69,15
Y31	17061,71
Y32	43,00
Y34	14,00
Y35	446,00
Y36	213,97
Y38	85,95
Y41	8,80
Y42	1601,62
Y45	1855,78
Y46	12629,26
Y47	143807,33
Σ	538767,58

Ex2010	R13
Y_	4498,97
Y1	0,12
Y2	900,37
Y5	5631,15
Y6	2210,21
Y8	12077,19
Y9	162,75
Y11	333,94
Y12	163,57
Y16	15,00
Y18	6333,31
Y22	18,00
Y23	175,06
Y26	241,89
Y29	7,07
Y31	6443,58
Y34	53,72
Y35	176,08
Y41	1087,27
Y42	12943,19
Y45	437,20
Y46	2839,00
Σ	56748,64

Table 24: Import in the year 2010 according to waste stream and final disposal operations [in Mg]

Im 2010	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y_	192653,83				30,10			39702,47	26948,65	196470,70		34,38	5523,29	27,23	48,59
Y1					12,14				24,24	3825,28				160,27	86,54
Y2								888,00	354,35	38294,20			11,91	23,22	125,37
Y3					5,25				45,00	1360,17					59,97
Y4					3376,56				32,16	13813,60		69,46	101,19	619,57	
Y5								24,18							
Y6		12,45			6,41				1114,15	35824,58		20,76	136,30		17,11
Y7										73,69		406,08		17,94	
Y8		54,31			7,84			221,80	1704,57	15724,24					497,00
Y9	4297,27	15,26			4,80			5655,99	9036,87	3468,14			2508,58		27,21
Y10									50,32	4802,63		1132,20	0,15	46,97	0,62
Y11	24701,84				422,18			22,02		4068,20				112,36	
Y12					29,17			268,18	4611,94	23895,55			1153,57		238,19
Y13					0,19			51,26	1491,54	3585,04				36,00	182,94
Y14					9,82				9,00	1497,70		48,50	9,00		4,42
Y15										942,51					
Y16									482,07	3075,50			16,05	15,00	
Y17	2362,80								7132,48	734,41		5370,61	2,75	26,36	181,30
Y18	175988,26				3850,35	72,00		10741,59	31071,84	243786,07		38623,39	5548,77		0,98
Y19										33,30					
Y20					12,49					45,35			34,36		
Y21					621,53				5763,04	1279,11		37,20	250,09		
Y22	536,48				87100,00				2029,48	425,22					
Y23	57,80								1672,03			205,07			
Y24					454,39				457,07	39,91		807,34	0,02		
Y25					1028,38					98,29			4,23		
Y26					3,57				5826,64	966,13			2,72		

Im 2010	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y27															
Y28									94,47	112,28					
Y29	12,44				60,66			24,33	22448,55	300,09		1080,53	139,50		
Y30															
Y31	6721,62				5740,20				20554,51	363,88		14052,18	299,19		
Y32					5469,65				93,05	11,61				11,40	
Y33					3565,00				3055,30	114,29			0,11		
Y34					48,04				8347,11	1772,71			382,67	17,88	
Y35					121,98				1660,87	12898,46			165,50		1,10
Y36	408016,38				0,76				5,65			104,32			42,00
Y37										4,03		2,32	18,12		
Y38										105,88					
Y39					4100,44				302,71	554,19			19,99	87,64	
Y40										554,19					
Y41					13756,25			7888,18	1562,95	35449,98			442,07		
Y42					530,33			2584,89	3304,63	35198,21			2456,34		1723,78
Y43										193,20					
Y44										11,50					
Y45					70,26				79600,00	1430,44		1533,05	0,24		5,30
Y46	19847,83							128,18		273303,62					0,80
Y47	29200,16								2336,82						

Table 25: Data according to waste streams and import for final disposal in 2010

Im 2010	D1
Y_	192653,83
Y9	4297,27
Y11	24701,84
Y17	2362,80
Y18	175988,26
Y22	536,48
Y23	57,80
Y29	12,44
Y31	6721,62
Y36	408016,38
Y46	19847,83
Y47	29200,16
Σ	864396,71

Im 2010	D2
Y6	12,45
Y8	54,31
Y9	15,26
Σ	82,02

Im 2010	D5
Y_	30,10
Y1	12,14
Y3	5,25
Y4	3376,56
Y6	6,41
Y8	7,84
Y9	4,80
Y11	422,18
Y12	29,17
Y13	0,19
Y14	9,82
Y18	3850,35
Y20	12,49
Y21	621,53
Y22	87100,00
Y24	454,39
Y25	1028,38
Y26	3,57
Y29	60,66
Y31	5740,20
Y32	5469,65
Y33	3565,00
Y34	48,04
Y35	121,98
Y36	0,76
Y39	4100,44
Y41	13756,25
Y42	530,33
Y45	70,26
Σ	130438,74

Im 2010	D6
Y18	72,00

Im 2010	D8
Y_	39702,47
Y2	888,00
Y5	24,18
Y8	221,80
Y9	5655,99
Y11	22,02
Y12	268,18
Y13	51,26
Y18	10741,59
Y29	24,33
Y41	7888,18
Y42	2584,89
Y46	128,18
Σ	68201,07

Im 2010	D9
Y_	26948,65
Y1	24,24
Y2	354,35
Y3	45,00
Y4	32,16
Y6	1114,15
Y8	1704,57
Y9	9036,87
Y10	50,32
Y12	4611,94
Y13	1491,54
Y14	9,00
Y16	482,07
Y17	7132,48
Y18	31071,84
Y21	5763,04
Y22	2029,48
Y23	1672,03
Y24	457,07
Y26	5826,64
Y28	94,47
Y29	22448,55
Y31	20554,51
Y32	93,05
Y33	3055,30
Y34	8347,11
Y35	1660,87
Y36	5,65
Y39	302,71
Y41	1562,95
Y42	3304,63
Y45	79600,00
Y47	2336,82
Σ	243224,06

Im 2010	D10
Y_	196470,70
Y1	3825,28
Y2	38294,20
Y3	1360,17
Y4	13813,60
Y6	35824,58
Y7	73,69
Y8	15724,24
Y9	3468,14
Y10	4802,63
Y11	4068,20
Y12	23895,55
Y13	3585,04
Y14	1497,70
Y15	942,51
Y16	3075,50
Y17	734,41
Y18	243786,07
Y19	33,30
Y20	45,35
Y21	1279,11
Y22	425,22
Y24	39,91
Y25	98,29
Y26	966,13
Y28	112,28
Y29	300,09
Y31	363,88
Y32	11,61
Y33	114,29
Y34	1772,71
Y35	12898,46
Y37	4,03
Y38	105,88
Y39	1294,84
Y40	554,19
Y41	35449,98
Y42	35198,21
Y43	193,20
Y44	11,50
Y45	1430,44
Y46	273303,62
Σ	961248,73

Im 2010	D12
Y_	34,38
Y4	69,46
Y6	20,76
Y7	406,08
Y10	1132,20
Y14	48,50
Y17	5370,61
Y18	38623,39
Y21	37,20
Y23	205,07
Y24	807,34
Y29	1080,53
Y31	14052,18
Y36	104,32
Y37	2,32
Y45	1533,05
Σ	63527,39

Im 2010	D13
Y_	5523,29
Y2	11,91
Y4	101,19
Y6	136,30
Y9	2508,58
Y10	0,15
Y12	1153,57
Y14	9,00
Y16	16,05
Y17	2,75
Y18	5548,77
Y20	34,36
Y21	250,09
Y24	0,02
Y25	4,23
Y26	2,72
Y29	139,50
Y31	299,19
Y33	0,11
Y34	382,67
Y35	165,50
Y37	18,12
Y39	19,99
Y41	442,07
Y42	2456,34
Y45	0,24
Σ	19226,71

Im 2010	D14
Y_	27,23
Y1	160,27
Y2	23,22
Y4	619,57
Y7	17,94
Y10	46,97
Y11	112,36
Y13	36,00
Y16	15,00
Y17	26,36
Y32	11,40
Y34	17,88
Y39	87,64
Σ	1201,84

Im 2010	D15
Y1	86,54
Y2	125,37
Y3	59,97
Y6	17,11
Y8	497,00
Y9	27,21
Y10	0,62
Y12	238,19
Y13	182,94
Y14	4,42
Y17	181,30
Y18	0,98
Y35	1,10
Y36	42,00
Y42	1723,78
Y45	5,30
Y46	0,80
Σ	3194,63

Table 26: Import in the year 2010 according to waste stream and recovery operations [in Mg]

Im 2010	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y_	956560,78	337,41	685094,51	929353,18	415399,89			4743,40	43491,36	50705,79	20,40	92258,96	
Y1	20,00											104,58	
Y2	9083,42	30782,85	683,23	1658,56	32,88		327,36					48,46	1211,24
Y3	105,69												
Y4			183,98	102,45	142,30								
Y5	20601,10	0,25	95466,50				884,45					46469,35	19565,94
Y6	18810,27	11433,57		5326,55	2070,79	673,00	556,80	3569,88			165,05	5732,96	
Y7	4958,78			53,88	57,08	21,08						27,24	
Y8	23531,65	2156,10	500,00	361,30					191849,94		3678,32	2487,53	5996,62
Y9	11522,53		29302,20	485,18	16991,83				69415,67			14444,67	1025,29
Y10	371,81			4401,51	1581,30							457,39	
Y11	74,97			33099,93	296,29						205,31	19,46	701,34
Y12	6045,47	4209,99	380,16	2998,29	1019,46	1707,45	302,99				368,46	11755,31	167,18
Y13	2138,65	540,00	196,66	21,85	130,30								
Y14	1,00			2454,38		59,74							
Y15				403,17									
Y16			22,39	2869,43	8348,56		105,10				239,34	48,63	0,33
Y17	656,33	0,50	145,86	68577,13	39272,57	1150,80						519,30	1353,68
Y18	626398,68	52209,60	134992,93	113076,31	748321,46	496,62	4227,90	300,15	7052,90		642,80	52128,59	3826,87
Y19				8,74									
Y20				4331,77									
Y21				382,50	568,54								
Y22	1274,82			61397,89	284,89							16015,00	
Y23				609163,47	19663,46							4951,70	
Y24	19,35			313,53				187,60					
Y25				518,52									
Y26				12650,63	1433,78								98,62

Im 2010	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y27				80,44							2520,26		
Y28													
Y29	11,81			4462,82	4516,75							1583,09	54,02
Y30				1,59									
Y31	4320,49	0,12	354,90	914527,87	43063,71			94,90				13698,54	2123,09
Y32	11318,59			3147,83	27047,47								31,00
Y33				60,06									
Y34	14,54	1645,10	86,94	2646,16	30244,58	26316,40							0,03
Y35	19,18	22,47	4638,42	3101,68	1872,55	6379,31		429,77				616,85	189,91
Y36				2117,34	5,79							345,89	7,32
Y37													
Y38	5351,46												
Y39	414,64		144,48										
Y40													
Y41	891,51	3913,97	823,81				1107,30					87,00	7,00
Y42	19369,42	26422,33	4944,22	1,00	128,40		67,64		18,00			2800,70	7,32
Y43													
Y44	746,42												
Y45	7435,46		8275,25	5568,88		189,35						8989,76	
Y46	249683,96		75218,64	188,00								71031,50	
Y47				62,00	456646,12							2452,64	

Table 27: Data according to waste streams and import for recovery in 2010

Im2010	R1
Y_	956560,78
Y1	20,00
Y2	9083,42
Y3	105,69
Y5	20601,10
Y6	18810,27
Y7	4958,78
Y8	23531,65
Y9	11522,53
Y10	371,81
Y11	74,97
Y12	6045,47
Y13	2138,65
Y14	1,00
Y17	656,33
Y18	626398,68
Y22	1274,82
Y24	19,35
Y29	11,81
Y31	4320,49
Y32	11318,59
Y34	14,54
Y35	19,18
Y38	5351,46
Y39	414,64
Y41	891,51
Y42	19369,42
Y44	746,42
Y45	7435,46
Y46	249683,96
Σ	1981752,78

Im2010	R2
Y_	337,41
Y2	30782,85
Y5	0,25
Y6	11433,57
Y8	2156,10
Y12	4209,99
Y13	540,00
Y17	0,50
Y18	52209,60
Y31	0,12
Y34	1645,10
Y35	22,47
Y41	3913,97
Y42	26422,33
Σ	133674,26

Im2010	R3
Y_	685094,51
Y2	683,23
Y4	183,98
Y5	95466,50
Y6	12138,06
Y8	500,00
Y9	29302,20
Y12	380,16
Y13	196,66
Y16	22,39
Y17	145,86
Y18	134992,93
Y31	354,90
Y34	86,94
Y35	4638,42
Y39	144,48
Y41	823,81
Y42	4944,22
Y45	8275,25
Y46	75218,64
Σ	1053593,14

lm2010	R4
Y_	929353,18
Y2	1658,56
Y4	102,45
Y6	5326,55
Y7	53,88
Y8	361,30
Y9	485,18
Y10	4401,51
Y11	33099,93
Y12	2998,29
Y13	21,85
Y14	2454,38
Y15	403,17
Y16	2869,43
Y17	68577,13
Y18	113076,31
Y19	8,74
Y20	4331,77
Y21	382,50
Y22	61397,89
Y23	609163,47
Y24	313,53
Y25	518,52
Y26	12650,63
Y27	80,44
Σ	1854090,59

lm2010	R5
Y_	415399,89
Y2	32,88
Y4	142,30
Y6	2070,79
Y7	57,08
Y9	16991,83
Y10	1581,30
Y11	296,29
Y12	1019,46
Y13	130,30
Y16	8348,56
Y17	39272,57
Y18	748321,46
Y21	568,54
Y22	284,89
Y23	19663,46
Y26	1433,78
Y29	4516,75
Y31	43063,71
Y32	27047,47
Y34	30244,58
Y35	1872,55
Y36	5,79
Y42	128,40
Y47	456646,12
Σ	1819140,75

lm2010	R6
Y6	673,00
Y7	21,08
Y12	1707,45
Y14	59,74
Y17	1150,80
Y18	496,62
Y34	26316,40
Y35	6379,31
Y45	189,35
Σ	36993,75

lm2010	R7
Y2	327,36
Y5	884,45
Y6	556,80
Y12	302,99
Y16	105,10
Y18	4227,90
Y41	1107,30
Y42	67,64
Σ	7579,54

lm2010	R8
Y_	4743,40
Y6	3569,88
Y18	300,15
Y24	187,60
Y31	94,90
Y35	429,77
Σ	9325,7

lm2010	R9
Y_	43491,36
Y8	191849,94
Y9	69415,67
Y18	7052,90
Y42	18,00
Σ	311827,87

lm2010	R10
Y_	50705,794

lm2010	R11
Y_	20,40
Y6	165,05
Y8	3678,32
Y11	205,31
Y12	368,46
Y16	239,34
Y18	642,80
Y27	2520,26
Σ	7839,94

lm2010	R12
Y_	92258,96
Y1	104,58
Y2	48,46
Y5	46469,35
Y6	5732,96
Y7	27,24
Y8	2487,53
Y9	14444,67
Y10	457,39
Y11	19,46
Y12	11755,31
Y13	792,69
Y14	418,42
Y15	866,00
Y16	48,63
Y17	519,30
Y18	52128,59
Y22	16015,00
Y23	4951,70
Y29	1583,09
Y31	13698,54
Y35	616,85
Y36	345,89
Y41	87,00
Y42	2800,70
Y45	8989,76
Y46	71031,50
Y47	2452,64
Σ	351152,21

lm2010	R13
Y_	46711,46
Y2	1211,24
Y5	19565,94
Y8	5996,62
Y9	1025,29
Y11	701,34
Y12	167,18
Y16	0,33
Y17	1353,68
Y18	3826,87
Y26	98,62
Y29	54,02
Y31	2123,09
Y32	31,00
Y34	0,03
Y35	189,91
Y36	7,32
Y41	7,00
Y42	7,32
Σ	83078,26

2. Final disposal and recovery codes used in export and imports for the reporting year 2013

Table 28: Export in the year 2013 according to waste stream and final disposal operations [in Mg]

Ex2013	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y_	152494,25	80,00	1027,48		1066,78			1723,96	56934,57	60793,60	137,06	17746,70	162,67	0,25	2193,51
Y1									1988,14	5295,23			193,96	105,48	3,07
Y2	48,80					18425,00			90,70	34664,58					218,81
Y3					512,11				138,02	1810,59			246,00	14,62	
Y4					1,62					51463,60		218,20			
Y5									4,00	19,04					
Y6					46,40				459,61	28610,39			91,71	72,04	
Y7										6823,01		249,99			
Y8					600,00			13,84	799,36	6798,02					
Y9	50,00				32930,00			133988,95	10203,43	47206,04					3094,00
Y10									239,70	7165,54				96,20	
Y11									968,29	19022,30		8,96			
Y12									4104,55	26745,50			152,42		
Y13	1000,00								2802,87	2595,82					
Y14									76,88	919,71					
Y15									7,76	513,10					5,30
Y16									387,38	1232,82		3,66			
Y17	730,96		913,38		28,00				5292,03	1385,73		258,97			
Y18	2171,79		2614,51		137,20			2546,37	26934,46	284455,50		4427,11	9630,79	2493,74	2827,10
Y19										2996,30					0,01
Y20										242,14					
Y21			4609,74						532,91	739,36					
Y22			32,50						805,76	13606,84					
Y23									130,22	66,41					1046,16

Ex2013	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y24									522,20	172,85		1944,24			
Y25					333,96										
Y26									7803,99			21,46			
Y27										22,00					
Y28															
Y29	179,61				41,14				161,59	323,52		16205,31			
Y30										399,59					
Y31	233,37		39,30		4529,07				2798,53	2545,96		24,18			
Y32					5236,44				5505,73	75,49			4088,15		
Y33									0,01	57,53		18,63			
Y34			682,76						6421,48	2570,70					0,13
Y35									14446,21	1488,82			0,29		0,00
Y36	34911,20				7501,92				13697,52	10,54					206,52
Y37									18,91	198,64			0,00		
Y38										0,21					
Y39										1221,83					
Y40															
Y41									30,12	52595,30			13,45	1,49	0,01
Y42								3420,30	2333,19	20535,87			65,90		0,00
Y43									149,24						
Y44										15,28					
Y45									25,79	3771,15			0,01		
Y46	3790,18							535,04		457315,84					
Y47	14549,30				793,77				85730,17			2717,03			

Table 29: Data according to waste streams and export for final disposal in 2013

Ex2013	D1
Y_	152494,25
Y2	48,80
Y9	50,00
Y13	1000,00
Y17	730,96
Y18	2171,79
Y29	179,61
Y31	233,37
Y36	34911,20
Y46	3790,18
Y47	14549,30
Σ	210159,46

Ex2013	D2
Y_	80,00

Ex2013	D3
Y_	1027,48
Y17	913,38
Y18	2614,51
Y21	4609,74
Y22	32,50
Y31	39,30
Y34	682,76
Σ	9919,67

Ex2013	D5
Y_	1066,78
Y3	512,11
Y4	1,62
Y6	46,40
Y8	600,00
Y9	32930,00
Y17	28,00
Y18	137,20
Y25	333,96
Y29	41,14
Y31	4529,07
Y32	5236,44
Y36	7501,92
Y47	793,77
Σ	53758,41

Ex2013	D6
Y2	18425,00

Ex2013	D8
Y_	1723,96
Y8	13,84
Y9	133988,95
Y18	2546,37
Y42	3420,30
Y46	535,04
Σ	142228,46

Ex2013	D9
Y_	56934,57
Y1	1988,14
Y2	90,70
Y3	138,02
Y5	4,00
Y6	459,61
Y8	799,36
Y9	10203,43
Y10	239,70
Y11	968,29
Y12	4104,55
Y13	2802,87
Y14	76,88
Y15	7,76
Y16	387,38
Y17	5292,03
Y18	26934,46
Y21	532,91
Y22	805,76
Y23	130,22
Y24	522,20
Y26	7803,99
Y29	161,59
Y31	2798,53
Y32	5505,73
Y33	0,01
Y34	6421,48
Y35	14446,21
Y36	13697,52
Y37	18,91
Y41	30,12
Y42	2333,19
Y43	149,24
Y45	25,79
Y47	85730,17
Σ	252545,32

Ex2013	D10
Y_	60793,60
Y1	5295,23
Y2	34664,58
Y3	1810,59
Y4	51463,60
Y5	19,04
Y6	28610,39
Y7	6823,01
Y8	6798,02
Y9	47206,04
Y10	7165,54
Y11	19022,30
Y12	26745,50
Y13	2595,82
Y14	919,71
Y15	513,10
Y16	1232,82
Y17	1385,73
Y18	284455,50
Y19	2996,30
Y20	242,14
Y21	739,36
Y22	13606,84
Y23	66,41
Y24	172,85
Y27	22,00
Y29	323,52
Y30	399,59
Y31	2545,96
Y32	75,49
Y33	57,53
Y34	2570,70
Y35	1488,82
Y36	10,54
Y37	198,64
Y38	0,21
Y39	1221,83
Y41	52595,30
Y42	20535,87
Y44	15,28
Y45	3771,15
Y46	457315,84
Σ	1148492,29

Ex2013	D11
Y_	137,06

Ex2013	D12
Y_	17746,70
Y4	218,20
Y7	249,99
Y11	8,96
Y16	3,66
Y17	258,97
Y18	4427,11
Y24	1944,24
Y26	21,46
Y29	16205,31
Y31	24,18
Y33	18,63
Y47	2717,03
Σ	43844,44

Ex2013	D13
Y_	162,67
Y1	193,96
Y3	246,00
Y6	91,71
Y12	152,42
Y18	9630,79
Y32	4088,15
Y35	0,29
Y37	0,00
Y41	13,45
Y42	65,90
Y45	0,01
Σ	14645,35

Ex2013	D14
Y_	0,25
Y1	105,48
Y3	14,62
Y6	72,04
Y10	96,20
Y18	2493,74
Y41	1,49
Σ	2783,82

Ex2013	D15
Y_	2193,51
Y1	3,07
Y2	218,81
Y9	3094,00
Y15	5,30
Y18	2827,10
Y19	0,01
Y23	1046,16
Y34	0,13
Y35	0,00
Y36	206,52
Y41	0,01
Y42	0,00
Σ	9594,62

Table 30: Export in the year 2013 according to waste stream and recovery operations [inMg]

Ex 2013	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y_	376355,54	124,98	81794,25	429692,76	246764,99	232,24	13123,91	24192,44	17043,19	2799,40	248,85	168378,22	10111,24
Y1	1691,73	5,91	0,23	9,44								624,53	0,08
Y2	3998,05	9714,06	2893,96	4857,52	3359,67	240,62	380,53	29,87				1348,00	
Y3	179,41	97,40	64,06	9,16									1233,99
Y4	196,86	30,64	84,34	115,46	4673,80		113,93						
Y5	166402,97											2455,64	83420,17
Y6	43961,39	14331,97	10671,65	35,92	739,03		842,02		53,93			6681,93	3404,47
Y7				1000,00	1206,20								
Y8	274684,22	226,85	10671,65	84207,73	721,79				175943,65		147,90	35670,74	14335,35
Y9	62459,23	7917,96	104702,46	82907,60	9284,65				39388,46			11043,13	5464,28
Y10	2760,62		179,00	1971,25	1075,00							1858,95	483,82
Y11	8056,94		219,44	4561,49	29903,63			9,11	4403,61			3549,92	
Y12	22937,43	2946,65	8194,27	7910,83	379,11	33,56	152,13	10,06	352,76			4913,56	349,73
Y13	2941,37		993,43	2031,32	65,66							253,58	1159,68
Y14	28,46	500,00	286,14	151,94								4,71	
Y15		68,00		1074,45								71,66	1494,08
Y16	43,35	1236,60	41,11	3118,44	15185,02		571,85				1279,15	88,10	23,60
Y17	2031,55	36,98	490,72	77424,83	154385,09	1998,24					0,00	1621,93	817,03
Y18	1512984,27	3385,44	224621,55	181246,25	117001,29	51,42	5999,82	5,50	1762,55		23752,23	209705,48	22275,36
Y19								484,33					
Y20				280,85									
Y21				530,69									
Y22	2754,37			38632,43	1187,55			17,60			13896,58	17304,90	
Y23	118,38	0,74	1241,02	481488,08	8514,42	21094,76					115,98	2598,00	219,92
Y24	11225,04			9390,41	3,60							364,92	
Y25			589,34	529,30									
Y26	35,33			14968,39	9,62			26,00				68,38	44,33

Ex 2013	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y27		48,98		340,47									
Y28				400,37									
Y29	10,63	34,92	44,96	3030,05	3478,47		81,04				40,00	1079,88	40,34
Y30												0,00	
Y31	27399,99	998,03	18726,77	640571,17	34709,22			9,00	7080,32			14504,45	8520,21
Y32	3917,15		19,69	7418,49	33415,45							548,61	
Y33				2,34	19200,00								
Y34	8453,08		90,09	16195,36	74874,46	140279,68						267,78	66,58
Y35	2260,66	227,42	38,64	7841,78	15822,94	14376,24							5,35
Y36	589,44		15,00	870,20								97,07	105,98
Y37				4931,44									
Y38	17428,77											63,64	
Y39	2224,61		405,00		57,30							3404,56	403,32
Y40				1430,35	154,60								13,20
Y41	1129,06	2419,35	138,22	93,10	164,73							45,40	802,95
Y42	46669,11	36449,27	16085,76	1797,09	1585,86	49,76						2760,69	3339,02
Y43													
Y44	361,20												
Y45	7801,95	347,87	17990,51	8640,68	8115,08	20,62	52,88		4696,57		38,92	914,64	
Y46	3721339,98	6577,78	205402,88	42894,01	99628,90	43,56			62626,17		6874,60	66274,01	5671,82
Y47	3471,70			51506,82	440213,45						41711,07	140679,96	

Table 31: Data according to waste streams and import for final disposal in 2013

Ex2013	R1
Y_	376355,54
Y1	1691,73
Y2	3998,05
Y3	179,41
Y4	196,86
Y5	166402,97
Y6	43961,39
Y8	274684,22
Y9	62459,23
Y10	2760,62
Y11	8056,94
Y12	22937,43
Y13	2941,37
Y14	28,46
Y16	43,35
Y17	2031,55
Y18	1512984,27
Y22	2754,37
Y23	118,38
Y24	11225,04
Y26	35,33
Y29	10,63
Y31	27399,99
Y32	3917,15
Y34	8453,08
Y35	2260,66
Y36	589,44
Y38	17428,77
Y39	2224,61
Y41	1129,06
Y42	46669,11
Y44	361,20
Y45	7801,95
Y46	3721339,98
Y47	3471,70
Σ	6338903,84

Ex2013	R2
Y_	124,98
Y1	5,91
Y2	9714,06
Y3	97,40
Y4	30,64
Y6	14331,97
Y8	226,85
Y9	7917,96
Y12	2946,65
Y14	500,00
Y15	68,00
Y16	1236,60
Y17	36,98
Y18	3385,44
Y23	0,74
Y27	48,98
Y29	34,92
Y31	998,03
Y36	227,42
Y41	2419,35
Y42	36449,27
Y45	347,87
Y46	6577,78
Σ	87727,8

Ex2013	R3
Y_	81794,25
Y1	0,23
Y2	2893,96
Y3	64,06
Y4	84,34
Y6	10671,65
Y8	10671,65
Y9	104702,46
Y10	179,00
Y11	219,44
Y12	8194,27
Y13	993,43
Y14	286,14
Y16	41,11
Y17	490,72
Y18	224621,55
Y23	1241,02
Y25	589,34
Y29	44,96
Y31	18726,77
Y32	19,69
Y34	90,09
Y35	38,64
Y36	15,00
Y39	405,00
Y41	138,22
Y42	16085,76
Y45	17990,51
Y46	205402,88
Σ	706696,14

Ex2013	R4
Y_	429692,76
Y1	9,44
Y2	4857,52
Y3	9,16
Y4	115,46
Y6	35,92
Y7	1000,00
Y8	84207,73
Y9	82907,60
Y10	1971,25
Y11	4561,49
Y12	7910,83
Y13	2031,32
Y14	151,94
Y15	1074,45
Y16	3118,44
Y17	77424,83
Y18	181246,25
Y20	280,85
Y21	530,69
Y22	38632,43
Y23	481488,08
Y24	9390,41
Y25	529,30
Y26	14968,39
Y27	340,47
Y28	400,37
Y29	3030,05
Y31	640571,17
Y32	7418,49
Y33	2,34
Y34	16195,36
Y35	7841,78
Y36	870,20
Y37	4931,44
Y40	1430,35
Y41	93,10
Y42	1797,09
Y45	8640,68
Y46	42894,01
Y47	51506,82
Σ	2216110,26

Ex2013	R5
Y_	246764,99
Y2	3359,67
Y4	4673,80
Y6	739,03
Y7	1206,20
Y8	721,79
Y9	9284,65
Y10	1075,00
Y11	29903,63
Y12	379,11
Y13	65,66
Y16	15185,02
Y17	154385,09
Y18	117001,29
Y22	1187,55
Y23	8514,42
Y24	3,60
Y26	9,62
Y29	3478,47
Y31	34709,22
Y32	33415,45
Y33	19200,00
Y34	74874,46
Y35	15822,94
Y39	57,30
Y40	154,60
Y41	164,73
Y42	1585,86
Y45	8115,08
Y46	99628,90
Y47	440213,45
Σ	1325880,58

Ex2013	R6
Y_	232,24
Y2	240,62
Y12	33,56
Y17	1998,24
Y18	51,42
Y23	21094,76
Y34	140279,68
Y35	14376,24
Y42	49,76
Y45	20,62
Y46	43,56
Σ	178420,7

Ex2013	R7
Y_	13123,91
Y2	380,53
Y4	113,93
Y6	842,02
Y12	152,13
Y16	571,85
Y18	5999,82
Y29	81,04
Y45	52,88
Σ	21318,11

Ex2013	R8
Y_	24192,44
Y2	29,87
Y11	9,11
Y12	10,06
Y18	5,50
Y19	484,33
Y22	17,60
Y26	26,00
Y31	9,00
Σ	24783,91

Ex2013	R9
Y_	17043,19
Y6	53,93
Y8	175943,65
Y9	39388,46
Y11	4403,61
Y12	352,76
Y18	1762,55
Y31	7080,32
Y45	4696,57
Y46	62626,17
Σ	313351,21

Ex2013	R10
Y_	2799,40

Ex2013	R11
Y_	248,85
Y8	147,90
Y16	1279,15
Y17	0,00
Y18	23752,23
Y22	13896,58
Y23	115,98
Y29	40,00
Y44	38,92
Y45	6874,60
Y47	41711,07
Σ	88105,28

Ex2013	R12
Y_	168378,22
Y1	624,53
Y2	1348,00
Y5	2455,64
Y6	6681,93
Y8	35670,74
Y9	11043,13
Y10	1858,95
Y11	3549,92
Y12	4913,56
Y13	253,58
Y14	4,71
Y15	71,66
Y16	88,10
Y17	1621,93
Y18	209705,48
Y22	17304,90
Y23	2598,00
Y24	364,92
Y26	68,38
Y29	1079,88
Y30	0,00
Y31	14504,45
Y32	548,61
Y34	267,78
Y36	97,07
Y38	63,64
Y39	3404,56
Y41	45,40
Y42	2760,69
Y45	914,64
Y46	66274,01
Y47	140679,96
Σ	699246,97

Ex2013	R13
Y_	10111,24
Y1	0,08
Y3	1233,99
Y5	83420,17
Y6	3404,47
Y8	14335,35
Y9	5464,28
Y10	483,82
Y12	349,73
Y13	1159,68
Y15	1494,08
Y16	23,60
Y17	817,03
Y18	22275,36
Y23	219,92
Y26	44,33
Y29	40,34
Y31	8520,21
Y34	66,58
Y35	5,35
Y36	105,98
Y39	403,32
Y40	13,20
Y41	802,95
Y42	3339,02
Y46	5671,82
Σ	163805,9

Table 32: Import in the year 2013 according to waste stream and final disposal operations [inMg]

Im2013	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y_	152846,07							117367,30	34723,53	95744,38		5990,91	18,42	122,87	900,72
Y1									520,46	3463,34					
Y2					0,98				306,61	36736,11					56,03
Y3					62,12					2320,01					
Y4					310,51				1012,43	22864,90		219,92	28,71		
Y5					280,00			33,73		224,79			73,29		13,46
Y6					10,22				532,94	29550,84			3,64		
Y7									0,54	47,69		552,55			
Y8					2,66			13,84	555,14	5049,02			16,37		
Y9	8591,44							57858,60	8998,75	29539,44			0,05		
Y10										10868,12		278,42		63,35	
Y11	42073,24				2082,62			316,05	949,86	6085,16					
Y12	1165,58				74,86			199,96	6600,57	22967,59			83,81		13,90
Y13					40,42				3114,60	2246,58			89,65		40,22
Y14				2,46	21,83					2374,33					
Y15				14,00					15,31	882,98				3,00	
Y16									433,08	1458,34					
Y17									4471,86	668,70		3047,72			61,70
Y18	44348,67				129916,59			23733,92	43316,76	320326,10		51531,78	92,62		27651,64
Y19										75,59					
Y20															
Y21					1336,90				60883,79	278,01					
Y22					54,36				4339,48						
Y23	3182,46								238,02	74,29		320,85			1268,59
Y24					1725,37				16,13	14,96		1866,19			

Im2013	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y25					85,54				0,10	49,90			7,40		
Y26					5430,68				270,95			21,42	7,51		
Y27															
Y28									403,73						
Y29	5522,55				41,14				7597,82	297,78		13575,30	15,05	12,53	
Y30															
Y31	4511,76				24021,31				6677,92	843,93		20132,05	176,26		
Y32	72,72				15646,36				48,13	0,46					
Y33					62,54				2303,26	654,20		18,12	0,27		
Y34								55,96	6192,96	2131,47			290,53		
Y35					26,73				14192,57	2133,64			92,91		1,00
Y36	286431,67			15,32	1316,03				15647,10	1107,46		44,75	18,04		189,78
Y37										794,94		86,68	17,09		
Y38	174,50														
Y39					1791,37				16,33	456,29			23,17		2,13
Y40															
Y41					9310,41			6404,87	4519,27	40527,85			556,96	1,74	0,29
Y42					494,59			3304,18	1267,03				2161,91		1,52
Y43															
Y44															
Y45					40,46				6121,00						
Y46	877,45				16,45			2797,34	13511,52			3376,81			0,29
Y47	48306,93								67567,89			490,48			

Table 33: Data according to waste streams and import for final disposal in 2013

Im2013	D1
Y_	152846,07
Y9	8591,44
Y11	42073,24
Y12	1165,58
Y18	44348,67
Y23	3182,46
Y29	5522,55
Y31	4511,76
Y32	72,72
Y36	286431,67
Y38	174,50
Y46	877,45
Y47	48306,93
Σ	598105,04

Im2013	D4
Y14	2,46
Y15	14,00
Y36	15,32
Σ	31,78

Im2013	D5
Y2	0,98
Y3	62,12
Y4	310,51
Y5	280,00
Y6	10,22
Y8	2,66
Y11	2082,62
Y12	74,86
Y13	40,42
Y14	21,83
Y18	129916,59
Y21	1336,90
Y22	54,36
Y24	1725,37
Y25	85,54
Y26	5430,68
Y29	41,14
Y31	24021,31
Y32	15646,36
Y33	62,54
Y35	26,73
Y36	1316,03
Y39	1791,37
Y41	9310,41
Y42	494,59
Y45	40,46
Y46	16,45
Σ	194203,05

lm2013	D8
Y_	117367,30
Y5	33,73
Y8	13,84
Y9	57858,60
Y11	316,05
Y12	199,96
Y18	23733,92
Y21	2138,53
Y34	55,96
Y41	6404,87
Y42	3304,18
Y46	2797,34
Σ	214224,28

lm2013	D9
Y_	34723,53
Y1	520,46
Y2	306,61
Y4	1012,43
Y6	532,94
Y7	0,54
Y8	555,14
Y9	8998,75
Y11	949,86
Y12	6600,57
Y13	3114,60
Y15	15,31
Y16	433,08
Y17	4471,86
Y18	43316,76
Y21	60883,79
Y22	4339,48
Y23	238,02
Y24	16,13
Y25	0,10
Y26	270,95
Y28	403,73
Y29	7597,82
Y31	6677,92
Y32	48,13
Y33	2303,26
Y34	6192,96
Y35	14192,57
Y36	15647,10
Y39	16,33
Y41	4519,27
Y42	1267,03
Y45	6121,00
Y46	13511,52
Y47	67567,89
Σ	317367,44

lm2013	D10
Y_	95744,38
Y1	3463,34
Y2	36736,11
Y3	2320,01
Y4	22864,90
Y5	224,79
Y6	29550,84
Y7	47,69
Y8	5049,02
Y9	29539,44
Y10	10868,12
Y11	6085,16
Y12	22967,59
Y13	2246,58
Y14	2374,33
Y15	882,98
Y16	1458,34
Y17	668,70
Y18	320326,10
Y19	75,59
Y21	278,01
Y23	74,29
Y24	14,96
Y25	49,90
Y29	297,78
Y31	843,93
Y32	0,46
Y33	654,20
Y34	2131,47
Y35	2133,64
Y36	1107,46
Y37	794,94
Y39	456,29
Y41	40527,85
Σ	642859,19

Im2013	D12
Y_	5990,91
Y4	219,92
Y7	552,55
Y10	278,42
Y17	3047,72
Y18	51531,78
Y23	320,85
Y24	1866,19
Y26	21,42
Y29	13575,30
Y31	20132,05
Y33	18,12
Y36	44,75
Y37	86,68
Y46	3376,81
Σ	101063,47

Im2013	D13
Y_	18,42
Y4	28,71
Y5	73,29
Y6	3,64
Y8	16,37
Y9	0,05
Y12	83,81
Y13	89,65
Y18	92,62
Y25	7,40
Y26	7,51
Y29	15,05
Y31	176,26
Y33	0,27
Y34	290,53
Y35	92,91
Y36	18,04
Y37	17,09
Y39	23,17
Y41	556,96
Σ	1611,75

Im2013	D14
Y_	122,87
Y10	63,35
Y15	3,00
Y29	21,18
Y39	12,53
Y41	1,74
Σ	224,67

Im2013	D15
Y_	900,72
Y2	56,03
Y6	13,46
Y12	13,90
Y13	40,22
Y17	61,70
Y18	27651,64
Y23	1268,59
Y35	1,00
Y36	189,78
Y39	2,13
Y41	0,29
Y42	1,52
Y46	0,29
Σ	30201,27

Table 34: Import in the year 2013 according to waste stream and recovery operations [in Mg]

Im2013	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y_	451255,47	580,18	141070,69	413073,35	353669,61	2700,00	3570,56	3065,91				139908,26	11360,39
Y1	520,04		485,98	40,08								921,99	
Y2	9993,42	10002,91	811,45	168,44	1499,43		73,50					796,87	
Y3	366,93		163,16	19,25								218,24	
Y4	4912,88		21,20	121,60	62262,45		2916,99					117,98	
Y5	70671,35		9138,36									16560,85	6099,78
Y6	36218,84	35925,84	12975,01	1754,44	418,20			1955,34				1623,81	8,46
Y7	4314,90			178,42	17,29								
Y8	31432,88	17,44	12975,01	28981,76	20483,52							7493,40	27512,52
Y9	6364,05	1296,69	93814,57	4197,43	4144,89			5471,13				9788,40	76,30
Y10	1325,61			4164,93								142,49	
Y11	9119,27			9313,58	58540,53			160,82				5136,98	108,66
Y12	48184,05	546,41	7556,92	2197,24	290,30		2355,35					3596,79	47,30
Y13	8291,29	19,82	621,62	27,85			62,60					449,72	
Y14	32,72		193,70	9,40								4,71	
Y15		19,62	369,83	166,50	5,00							1016,80	12,18
Y16	7323,30		5,21	782,66	1094,01		3222,91					37,51	
Y17	2571,12		904,56	49141,71	59789,11	1268,17						916,12	103,42
Y18	1762860,08		233657,55	87350,01	860791,39	304,45	3222,91	2049,90				111257,96	12047,91
Y19													
Y20				16883,76	169,50							6771,90	
Y21	1019,11			1371,71									
Y22	2686,22			59541,21	5,53			4398,17				315,36	
Y23				588158,62	5724,04							1431,20	3,56
Y24	364,02			702,77	3,60		6,00						
Y25				49,91									
Y26	81,00			45888,98	9,84							1,16	50,59

Im2013	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y27				50,33									
Y28													
Y29				7482,02								503,67	5,02
Y30	10,90				190,42								
Y31	367,31	148,22	2026,00	1035482,70	82822,95							43774,54	1913,88
Y32	6546,83			13,36	1884,81								15,56
Y33			1548,81	13,86	8224,52								
Y34	485,85		106,26	16985,93	42710,80	67905,44						25,58	541,33
Y35	1217,80			3288,16	1608,00							264,17	
Y36		1171,35		1813,95		6404,13							
Y37	103,11												
Y38	3404,54											49,18	
Y39	402,54												
Y40				50,82								0,63	
Y41	823,55	5023,08	324,76		193,20		865,62						123,20
Y42	18199,35	37953,27	4048,65		2790,45		50,80					3610,79	1650,67
Y43													
Y44													
Y45	104300,22	16,99	8575,01	11658,90	194,71		78,10					174,80	
Y46	1161524,48		206191,70	1176,55	744,22							22179,54	15582,68
Y47				32650,53	333666,08							166557,01	

Table 35: Data according to waste streams and import for recovery in 2013

Im2013	R1
Y_	451255.47
Y1	520.04
Y2	9993.42
Y3	366.93
Y4	4912.88
Y5	70671.35
Y6	36218.84
Y7	4314.90
Y8	31432.88
Y9	6364.05
Y10	1325.61
Y11	9119.27
Y12	48184.05
Y13	8291.29
Y14	32.72
Y16	7323.30
Y17	2571.12
Y18	1762860.08
Y21	1019.11
Y22	2686.22
Y24	364.02
Y26	81.00
Y30	10.90
Y31	367.31
Y32	6546.83
Y34	485.85
Y35	1217.80
Y37	103.11
Y38	3404.54
Y39	402.54
Y41	823.55
Y42	18199.35
Y45	104300.22
Y46	1161524.48
Σ	3758783

Im2013	R2
Y_	580.18
Y2	10002.91
Y6	35925.84
Y8	17.44
Y9	1296.69
Y12	546.41
Y13	19.82
Y15	19.62
Y31	148.22
Y36	1171.35
Y41	5023.08
Y42	37953.27
Y45	16.99
Σ	93397

Im2013	R3
Y_	141070.69
Y1	485.98
Y2	811.45
Y3	163.16
Y4	21.20
Y5	9138.36
Y6	12975.01
Y8	12975.01
Y9	93814.57
Y12	7556.92
Y13	621.62
Y14	193.70
Y15	369.83
Y16	5.21
Y17	904.56
Y18	233657.55
Y31	2026.00
Y33	1548.81
Y34	106.26
Y41	324.76
Y42	4048.65
Y45	8575.01
Y46	206191.70
Σ	738676

lm2013	R4
Y_	413073.35
Y1	40.08
Y2	168.44
Y3	19.25
Y4	121.60
Y6	1754.44
Y7	178.42
Y8	28981.76
Y9	4197.43
Y10	4164.93
Y11	9313.58
Y12	2197.24
Y13	27.85
Y14	9.40
Y15	166.50
Y16	782.66
Y17	49141.71
Y18	87350.01
Y20	16883.76
Y21	1371.71
Y22	59541.21
Y23	588158.62
Y24	702.77
Y25	49.91
Y26	45888.98
Y27	50.33
Y29	7482.02
Y31	1035482.70
Y32	13.36
Y33	13.86
Y34	16985.93
Y35	3288.16
Y36	1813.95
Y40	50.82
Y45	11658.90
Y46	1176.55
Y47	32650.53
Σ	2427004

lm2013	R5
Y_	353669.61
Y2	1499.43
Y4	62262.45
Y6	418.20
Y7	17.29
Y8	20483.52
Y9	4144.89
Y11	58540.53
Y12	290.30
Y15	5.00
Y16	1094.01
Y17	59789.11
Y18	860791.39
Y20	169.50
Y22	5.53
Y23	5724.04
Y24	3.60
Y26	9.84
Y29	2601.45
Y30	190.42
Y31	82822.95
Y32	1884.81
Y33	8224.52
Y34	42710.80
Y35	1608.00
Y41	193.20
Y42	2790.45
Y45	194.71
Y46	744.22
Y47	333666.08
Σ	1907822

lm2013	R6
Y_	2700.00
Y17	1268.17
Y18	304.45
Y34	67905.44
Y35	6404.13
Σ	78700

lm2013	R7
Y_	3570.56
Y2	73.50
Y4	2916.99
Y12	2355.35
Y13	62.60
Y16	3222.91
Y18	19495.70
Y24	6.00
Y41	865.62
Y42	50.80
Y45	78.10
Σ	33305

lm2013	R8
Y_	3065.91
Y6	1955.34
Y9	5471.13
Y11	160.82
Y18	2049.90
Y22	4398.17
Σ	17425

lm2013	R9
Y_	2296,20
Y6	131,91
Y8	230421,33
Y9	125041,86
Y11	2886,30
Y17	37,86
Σ	360815,46

lm2013	R10
Y_	24347,6
Y45	44,26
Σ	24391,86

lm2013	R11
Y_	204793,13
Y8	1250,84
Y9	8562,64
Y16	401,42
Y18	1261,35
Σ	216269,38

lm2013	R12
Y_	139908.26
Y1	921.99
Y2	796.87
Y3	218.24
Y4	117.98
Y5	16560.85
Y6	1623.81
Y8	7493.40
Y9	9788.40
Y10	142.49
Y11	5136.98
Y12	3596.79
Y13	449.72
Y14	4.71
Y15	1016.80
Y16	37.51
Y17	916.12
Y18	111257.96
Y20	6771.90
Y22	315.36
Y23	1431.20
Y26	1.16
Y29	503.67
Y31	43774.54
Y34	25.58
Y35	264.17
Y38	49.18
Y40	0.63
Y42	3610.79
Y45	174.80
Y46	22179.54
Y47	166557.01
Σ	547471

lm2013	R13
Y_	11360.39
Y5	6099.78
Y6	8.46
Y8	27512.52
Y9	76.30
Y11	108.66
Y12	47.30
Y15	12.18
Y17	103.42
Y18	12047.91
Y23	3.56
Y26	50.59
Y29	5.02
Y31	1913.88
Y32	15.56
Y34	541.33
Y41	123.20
Y42	1650.67
Y46	15582.68
Σ	78195

3. Final disposal and recovery codes used in export and imports for the reporting year 2016

Table 36: Export in the year 2016 according to waste stream and final disposal operations [in Mg]

Ex2016	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y_	108198,21		119,93	12,56	5149,68			8695,58	79054,67	388921,64	7,22	3437,94		99,58	157,63
Y1					10,00				1814,77	4248,26				40,97	
Y2									132,44	64387,66					
Y3					132,00				31350,10	18744,11				1800,00	58,04
Y4										3728,85					
Y5										2302,35					
Y6										20176,54					
Y7												73,72			
Y8										2717,30					
Y9	1200,00				9682,39			95,72	1198,27	56341,83					396,00
Y10	22,14								20,27	4261,05					
Y11	2400,00								9,04	0,08					
Y12	1200,00								6487,82	28774,78					
Y13	1000,00								16,88	1893,18					
Y14										466,90					
Y15			206,83							234,93					
Y16									84,96	6958,21					
Y17	4474,08		35,26					71,26	11114,88	5974,31		3685,26			176,94
Y18	31005,58				15388,14	4000,00			17869,90	197040,02		5490,75			31288,89
Y19										67,30					
Y20										14,04					
Y21			29,89						95,26	32558,60		13,60			
Y22									241,48	193,00					
Y23	917,80								248,76	16,63		116,00			

Ex2016	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y24									2,40	228,17		95,96			0,00
Y25					91,56										
Y26			1653,41						2588,63	94,51					
Y27															
Y28															
Y29									468,38	197,72		499,89			0,00
Y30															
Y31	1416,26		127,15		463,88				3435,51	72,66		4693,22			
Y32	6816,71				5891,98				1,41	34,94					
Y33									0,00	34,94		12,80			
Y34			4720,05		764,10	1,00			7689,27	860,91					59,51
Y35			892,07						2150,49	715,79					
Y36	257741,90				12576,15				0,92	178,29					
Y37										387,98		106,00			
Y38															
Y39										388,50					
Y40										0,01					0,01
Y41			79,85						13,48	27913,27					
Y42										12475,35					0,00
Y43												1680,40			
Y44										1,99					
Y45									0,07	1402,39		8378,00			0,05
Y46	479,77									179090,22					
Y47					1102,50				10414,86			4483,14			

Table 37: Data according to waste streams and export for final disposal in 2016

Ex2016	D1
Y_	108198,21
Y9	1200,00
Y10	22,14
Y11	2400,00
Y12	1200,00
Y13	1000,00
Y17	4474,08
Y18	31005,58
Y23	917,80
Y31	1416,26
Y32	6816,71
Y36	257741,90
Y46	479,77
Σ	416872,45

Ex2016	D3
Y_	119,93
Y15	206,83
Y17	35,26
Y21	29,89
Y26	1653,41
Y31	127,15
Y34	4720,05
Y35	892,07
Y41	79,85
Σ	7864,44

Ex2016	D4
Y_	12,56

Ex2016	D5
Y_	5149,68
Y1	10,00
Y3	132,00
Y9	9682,39
Y18	15388,14
Y25	91,56
Y31	463,88
Y32	5891,98
Y34	764,10
Y36	12576,15
Y47	1102,50
Σ	51252,38

Ex2016	D6
Y18	4000,00
Y34	1,00
Σ	4001

Ex2016	D8
Y_	8695,58
Y9	95,72
Y17	71,26
Σ	8862,56

Ex2016	D9
Y_	79054,67
Y1	1814,77
Y2	132,44
Y3	31350,10
Y9	1198,27
Y10	20,27
Y11	9,04
Y12	6487,82
Y13	16,88
Y16	84,96
Y17	11114,88
Y18	17869,90
Y21	95,26
Y22	241,48
Y23	248,76
Y24	2,40
Y26	2588,63
Y29	468,38
Y31	3435,51
Y32	1,41
Y33	0,00
Y34	7689,27
Y35	2150,49
Y36	0,92
Y41	13,48
Y45	0,07
Y47	10414,86
Σ	176504,92

Ex2016	D10
Y_	388921,64
Y1	4248,26
Y2	64387,66
Y3	18744,11
Y4	3728,85
Y5	2302,35
Y6	20176,54
Y8	2717,30
Y9	56341,83
Y10	4261,05
Y11	0,08
Y12	28774,78
Y13	1893,18
Y14	466,90
Y15	234,93
Y16	6958,21
Y17	5974,31
Y18	197040,02
Y19	67,30
Y20	14,04
Y21	32558,60
Y22	193,00
Y23	16,63
Y24	228,17
Y26	94,51
Y29	197,72
Y31	72,66
Y32	34,94
Y33	34,94
Y34	860,91
Y35	715,79
Y36	178,29
Y37	387,98
Y39	388,50
Y40	0,01
Y41	27913,27
Y42	12475,35
Y44	1,99
Y45	1402,39
Y46	179090,22
Σ	1064099,21

Ex2016	D11
Y_	7,22

Ex2016	D12
Y_	3437,94
Y7	73,72
Y17	3685,26
Y18	5490,75
Y21	13,60
Y23	116,00
Y24	95,96
Y29	499,89
Y31	4693,22
Y33	12,80
Y37	106,00
Y43	1680,40
Y45	8378,00
Y47	4483,14
Σ	32766,68

Ex2016	D14
Y_	99,58
Y1	40,97
Y3	1800,00
Σ	1940,55

Ex2016	D15
Y_	157,63
Y3	58,04
Y9	396,00
Y17	176,94
Y18	31288,89
Y24	0,00
Y29	0,00
Y34	59,51
Y40	0,01
Y42	0,00
Y45	0,05
Σ	32137,07

Table 38: Export in the year 2016 according to waste stream and recovery operations [in Mg]

Ex2016	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y_	142463,48	19693,20	40368,64	374772,95	330699,87	5036,48	10777,00	21778,19	49766,94	43514,79	1121,83	150673,67	33425,35
Y1				7,35								404,55	
Y2	21357,79	13806,89	1207,27	4213,62	4206,26	20,00	267,00	84,50	129,96			2834,53	464,21
Y3	31,97		21,64										
Y4	301,87	15,91			3706,83		2250,03					592,28	
Y5	82463,77		3641,36	141,00								11485,74	
Y6	17208,74	6987,71	3914,90	1247,43	4173,74			733,40	156,52			953,75	1737,96
Y7				682,00	2662,83								
Y8	15012,28		1521,58		9500,95				81593,42		861,17	3416,98	462,08
Y9	11043,61	1448,14	21817,98	154,80	554,14		288,00	211,20	10158,18			1613,04	2382,93
Y10				1218,10	180,00							53,07	32,99
Y11	61299,19			7834,91	273276,11			96,81				10931,21	974,56
Y12	5779,10	184,73	964,60	401,07	458,63							2211,22	91,63
Y13	184,88		369,00	354,00	43,50							530,34	51,00
Y14	132,02		41,00									711,95	
Y15				488,84									
Y16				358,23	281,84								
Y17		466,00		176174,47	15194,99	213,97						896,78	72,24
Y18	153776,18	633,56	599,28	137163,90	191906,45		710,55				606,61	26456,47	3196,09
Y19													2000,00
Y20				94,06	33,02							20,07	
Y21				5992,64									
Y22	828,00		180,40	49201,10	424,92			326,48				39,00	
Y23				708914,86	282,68							66,52	
Y24				558,49	10,80								
Y25				101,67									
Y26				5634,56		266,30						73,11	213,54

Ex2016	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y27				160,12	447,16								
Y28													
Y29			23,80	32702,46	3684,27		52,62					3591,18	0,82
Y30													
Y31	3604,95	660,97		724577,05	21406,92							5929,67	8880,35
Y32				3301,49	29894,04							46,48	
Y33				42,64	2000,00								
Y34	430,84	610,22		3389,78	3729,99	131723,24						124,21	266,52
Y35				9419,53	1557,52	16530,15						86,94	1379,83
Y36		78,23		966,83	2,30							187,42	
Y37				578,17									
Y38													
Y39	1965,98		2717,89		77,52								24606,13
Y40												42,58	
Y41	1008,22	1324,03	542,20				259,78						295,03
Y42	41002,43	26146,91	6586,07	1759,61	517,76			0,33				1469,41	579,34
Y43					11,04								
Y44													
Y45	56,36		52318,97	6373,96	227,95							64,89	3,90
Y46	558435,70	16,36	85237,77	11461,02								16915,35	23,30
Y47				14300,87	268903,08							153058,70	

Table 39: Data according to waste streams and export for recovery in 2016

Ex2016	R1
Y_	142463,48
Y2	21357,79
Y3	31,97
Y4	301,87
Y5	82463,77
Y6	17208,74
Y8	15012,28
Y9	11043,61
Y11	61299,19
Y12	5779,10
Y13	184,88
Y14	132,02
Y18	153776,18
Y22	828,00
Y31	3604,95
Y34	430,84
Y39	1965,98
Y41	1008,22
Y42	41002,43
Y45	56,36
Y46	558435,70
Σ	1118387,36

Ex2016	R2
Y_	19693,20
Y2	13806,89
Y4	15,91
Y6	6987,71
Y9	1448,14
Y12	184,73
Y17	466,00
Y18	633,56
Y36	78,23
Y41	1324,03
Y42	26146,91
Y46	16,36
Σ	70801,67

Ex2016	R3
Y_	40368,64
Y2	1207,27
Y3	21,64
Y5	3641,36
Y6	3914,90
Y8	1521,58
Y9	21817,98
Y12	964,60
Y13	369,00
Y14	41,00
Y18	599,28
Y22	180,40
Y29	23,80
Y31	660,97
Y34	610,22
Y39	2717,89
Y41	542,20
Y42	6586,07
Y45	52318,97
Y46	85237,77
Σ	223345,54

Ex2016	R4
Y_	374772,95
Y1	7,35
Y2	4213,62
Y5	141,00
Y6	1247,43
Y7	682,00
Y9	154,80
Y10	1218,10
Y11	7834,91
Y12	401,07
Y13	354,00
Y15	488,84
Y16	358,23
Y17	176174,47
Y18	137163,90
Y20	94,06
Y21	5992,64
Y22	49201,10
Y23	708914,86
Y24	558,49
Y25	101,67
Y26	5634,56
Y27	160,12
Y29	32702,46
Y31	724577,05
Y32	3301,49
Y33	42,64
Y34	3389,78
Y35	9419,53
Y36	966,83
Y37	578,17
Y42	1759,61
Y45	6373,96
Y46	11461,02
Y47	14300,87
Σ	2284743,58

Ex2016	R5
Y_	330699,87
Y2	4206,26
Y4	3706,83
Y6	4173,74
Y7	2662,83
Y8	9500,95
Y9	554,14
Y10	180,00
Y11	273276,11
Y12	458,63
Y13	43,50
Y16	281,84
Y17	15194,99
Y18	191906,45
Y20	33,02
Y22	424,92
Y23	282,68
Y24	10,80
Y27	447,16
Y29	3684,27
Y31	21406,92
Y32	29894,04
Y33	2000,00
Y34	3729,99
Y35	1557,52
Y36	2,30
Y39	77,52
Y41	517,76
Y42	11,04
Y45	227,95
Y47	268903,08
Σ	1170057,11

Ex2016	R6
Y_	5036,48
Y2	20,00
Y17	213,97
Y26	266,30
Y34	131723,24
Y35	16530,15
Σ	153790,14

Ex2016	R7
Y_	10777,00
Y2	267,00
Y4	2250,03
Y9	288,00
Y18	710,55
Y29	52,62
Y41	259,78
Σ	14604,98

Ex2016	R8
Y_	21778,19
Y2	84,50
Y6	733,40
Y9	211,20
Y11	96,81
Y22	326,48
Y42	0,33
Σ	23230,91

Ex2016	R9
Y_	49766,94
Y2	129,96
Y6	156,52
Y8	81593,42
Y9	10158,18
Σ	141805,02

Ex2016	R10
Y_	43514,79

Ex2016	R11
Y_	1121,83
Y8	861,17
Y18	606,61
Σ	2589,61

Ex2016	R12
Y_	150673,67
Y1	404,55
Y2	2834,53
Y4	592,28
Y5	11485,74
Y6	953,75
Y8	3416,98
Y9	1613,04
Y10	53,07
Y11	10931,21
Y12	2211,22
Y13	530,34
Y14	711,95
Y17	896,78
Y18	26456,47
Y20	20,07
Y22	39,00
Y23	66,52
Y26	73,11
Y29	3591,18
Y31	5929,67
Y32	46,48
Y34	124,21
Y35	86,94
Y36	187,42
Y40	42,58
Y42	1469,41
Y45	64,89
Y46	16915,35
Y47	153058,70
Σ	395481,11

Ex2016	R13
Y_	33425,35
Y2	464,21
Y6	1737,96
Y8	462,08
Y9	2382,93
Y10	32,99
Y11	974,56
Y12	91,63
Y13	51,00
Y17	72,24
Y18	3196,09
Y19	2000,00
Y26	213,54
Y29	0,82
Y31	8880,35
Y34	266,52
Y35	1379,83
Y39	24606,13
Y41	295,03
Y42	579,34
Y45	3,90
Y46	23,30
Σ	81139,8

Table 40: Import in the year 2016 according to waste stream and final disposal operations [in Mg]

Im2016	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y_	302096,64				36499,71			52837,75	112589,80	174049,71	8994,72		142,24	162,84	447,69
Y1										2757,48					
Y2									119,10	18863,34					42,95
Y3								3,79		482,19					
Y4					873,90				187,62	13485,70	69,84		21,50		
Y5								193,64		73,90			64,61		
Y6									555,01	32633,95					285,03
Y7											327,75				
Y8					9,10					1801,67					45,60
Y9	3917,04								1788,76	3132,50	184,30				
Y10									7,04	1789,52	25,76				
Y11	45486,33							872,15		361,92					
Y12									1264,54	115608,00			10,31		28,89
Y13									32,64	1429,47			193,93		7854,93
Y14									0,30	3,19					0,22
Y15									74,25	761,35					
Y16									38,84	19065,74					
Y17	2928,85								2254,33	27584,51	3973,33				373,72
Y18	25234,67							4031,79	8076,02	218795,69	30240,52		176,10		586,41
Y19															
Y20										18,13					
Y21					2087,97				2177,03	242,48					
Y22	625,76				94,09				5563,52	48,99					
Y23	6684,26								83,27	21,92	186,42				
Y24					1839,50				90,47	980,22	3170,68				
Y25					2542,88								22,04		
Y26									0,61		8,02		6,09		

lm2016	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
Y27															
Y28									164,51						
Y29	5843,24				57,04				6123,72	27,41	3173,49		1,96	18,32	
Y30															
Y31	28,70				3213,08				17073,94	261,62	345,58		160,07		
Y32	141,58				1550,26				13,82				0,08		
Y33					39,71				2060,85	23,89					
Y34					6,22				5081,71	2080,82			375,15		
Y35									1744,01	3012,70			128,01		
Y36	198063,81								24,91	9,20	78,88				
Y37					60,17					9,59			2,28		
Y38															
Y39					619,63					101,64			11,17	1,02	2,32
Y40															
Y41					12257,30			3656,49	203,07	34764,94			1198,54		0,43
Y42					12257,30					34736,53			1506,88		131,89
Y43															
Y44										6526,05					
Y45									2039,63	2783,05	2689,00				0,09
Y46	787,27							5249,36		28236,82					
Y47	54699,93								20206,32						

Table 41: Data according to waste streams and import for final disposal in 2016

Im2016	D1
Y_	302096,64
Y9	3917,04
Y11	45486,33
Y17	2928,85
Y18	25234,67
Y22	625,76
Y23	6684,26
Y29	5843,24
Y31	28,70
Y32	141,58
Y36	198063,81
Y46	787,27
Y47	54699,93
Σ	646538,08

Im2016	D5
Y_	36499,71
Y4	873,90
Y8	9,10
Y21	2087,97
Y22	94,09
Y24	1839,50
Y25	2542,88
Y29	57,04
Y31	3213,08
Y32	1550,26
Y33	39,71
Y34	6,22
Y37	60,17
Y39	619,63
Y41	12257,30
Y42	12257,30
Σ	74007,86

Im2016	D8
Y_	52837,75
Y3	3,79
Y5	193,64
Y11	872,15
Y18	4031,79
Y41	3656,49
Y46	5249,36
Σ	66844,97

lm2016	D9
Y_	112589,80
Y2	119,10
Y4	187,62
Y6	555,01
Y9	1788,76
Y10	7,04
Y12	1264,54
Y13	32,64
Y14	0,30
Y15	74,25
Y16	38,84
Y17	2254,33
Y18	8076,02
Y21	2177,03
Y22	5563,52
Y23	83,27
Y24	90,47
Y26	0,61
Y28	164,51
Y29	6123,72
Y31	17073,94
Y32	13,82
Y33	2060,85
Y34	5081,71
Y35	1744,01
Y36	24,91
Y41	203,07
Y45	2039,63
Y47	20206,32
Σ	189639,64

lm2016	D10
Y_	174049,71
Y1	2757,48
Y2	18863,34
Y3	482,19
Y4	13485,70
Y5	73,90
Y6	32633,95
Y8	1801,67
Y9	3132,50
Y10	1789,52
Y11	361,92
Y12	115608,00
Y13	1429,47
Y14	3,19
Y15	761,35
Y16	19065,74
Y17	27584,51
Y18	218795,69
Y20	18,13
Y21	242,48
Y22	48,99
Y23	21,92
Y24	980,22
Y29	27,41
Y31	261,62
Y33	23,89
Y34	2080,82
Y35	3012,70
Y36	9,20
Y37	9,59
Y39	101,64
Y41	34764,94
Y42	34736,53
Y44	6526,05
Y45	2783,05
Y46	28236,82
Σ	746565,83

lm2016	D11
Y_	8994,72
Y4	69,84
Y7	327,75
Y9	184,30
Y10	25,76
Y17	3973,33
Y18	30240,52
Y23	186,42
Y24	3170,68
Y26	8,02
Y29	3173,49
Y31	345,58
Y36	78,88
Y45	2689,00
Σ	53468,29

lm2016	D13
Y_	142,24
Y4	21,50
Y5	64,61
Y12	10,31
Y13	193,93
Y18	176,10
Y25	22,04
Y26	6,09
Y29	1,96
Y31	160,07
Y32	0,08
Y34	375,15
Y35	128,01
Y37	2,28
Y39	11,17
Y41	1198,54
Y42	1506,88
Σ	4020,96

lm2016	D14
Y_	162,84
Y29	18,32
Y39	1,02
Σ	182,18

lm2016	D15
Y_	447,69
Y2	42,95
Y6	285,03
Y8	45,60
Y12	28,89
Y13	7854,93
Y14	0,22
Y17	373,72
Y18	586,41
Y39	2,32
Y41	0,43
Y42	131,89
Y45	0,09
Σ	9800,17

Table 42: Import in the year 2016 according to waste stream and recovery operations [in Mg]

Im2016	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y_	681212,41	9873,28	41696,77	584364,30	206949,70	2832,39	17206,11	14788,51	219573,40		18,83	157164,67	20041,22
Y1	883,13												
Y2	88,65		755,16	3,00	876,60							285,06	
Y3	0,23											80,05	
Y4	1290,30			120,07	3304,66								
Y5	24631,27											3207,30	
Y6	2474,20	2221,94	4058,98	429,45	5923,13			181,72	506,89			1201,55	
Y7				4,44									
Y8	3247,09	39,64	358,59						207386,50			2331,95	14856,03
Y9	8653,08	20,66	9191,66				1784,70		254218,29		6018,88	91,80	
Y10	25,90		911,00	168,36									
Y11	196,14			2529,18	4099,57							781,36	97,87
Y12	6465,87	431,96	3078,77	711,24	96,30		307,34		683,73			2719,46	110,49
Y13	2915,34		322,20	0,13								1551,89	16,60
Y14	2,21												
Y15			45,76	87,86									
Y16				1017,38	276,95		661,70				192,12		
Y17	42,16			566310,89	64971,75	1727,07	130,18		228,90			169,15	9,18
Y18	230852,99		49982,14	21302,11	366539,29		205,33			56369,35	3786,71	14215,50	6251,39
Y19													
Y20				6779,00								240,00	
Y21				8239,21									
Y22	3864,51		7,30	28346,57	33,28			43,86				750,67	
Y23				600739,05	3316,18							18,09	
Y24				606,89	10,80								
Y25				1,13									
Y26				1217,34								129,64	48,88

lm2016	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
Y27													
Y28													
Y29	326,42			5221,14	5576,94							1921,71	44,33
Y30													
Y31	20689,94	5,33	836,59	805140,96	17306,07							16899,20	3393,86
Y32	70,45											47,15	
Y33				7,33									
Y34	117,68		220,23	311,68	58312,39	12175,44			134,40			43186,07	
Y35	1,54			3148,61	644,69							106,28	7,54
Y36		847,65		1080,31								1402,56	2,00
Y37													
Y38	8222,27												
Y39	123,33				77,52								
Y40													
Y41	3319,61	3377,53	912,85		278,77		856,24					98,16	224,76
Y42	9727,54	35032,66	4365,28		1259,08							257,57	2948,80
Y43													
Y44													
Y45			8711,99	4921,60									
Y46	2523221,03		68400,45									109241,89	
Y47			141,06	4588,22	71177,97							81284,42	

Table 43: Data according to waste streams and import for recovery in 2016

Im2016	R1
Y_	681212,41
Y1	883,13
Y2	88,65
Y3	0,23
Y4	1290,30
Y5	24631,27
Y6	2474,20
Y8	3247,09
Y9	8653,08
Y10	25,90
Y11	196,14
Y12	6465,87
Y13	2915,34
Y14	2,21
Y17	42,16
Y18	230852,99
Y22	3864,51
Y29	326,42
Y31	20689,94
Y32	70,45
Y34	117,68
Y35	1,54
Y38	8222,27
Y39	123,33
Y41	3319,61
Y42	9727,54
Y46	2523221,03
Σ	3532665,29

Im2016	R2
Y_	9873,28
Y6	2221,94
Y8	39,64
Y9	20,66
Y12	431,96
Y31	5,33
Y36	847,65
Y41	3377,53
Y42	35032,66
Σ	51850,65

Im2016	R3
Y_	41696,77
Y2	755,16
Y6	4058,98
Y8	358,59
Y9	9191,66
Y10	911,00
Y12	3078,77
Y13	322,20
Y15	45,76
Y18	49982,14
Y22	7,30
Y31	836,59
Y34	220,23
Y41	912,85
Y42	4365,28
Y45	8711,99
Y46	68400,45
Y47	141,06
Σ	193996,78

lm2016	R4
Y_	584364,30
Y2	3,00
Y4	120,07
Y6	429,45
Y7	4,44
Y10	168,36
Y11	2529,18
Y12	711,24
Y13	0,13
Y15	87,86
Y16	1017,38
Y17	566310,89
Y18	21302,11
Y20	6779,00
Y21	8239,21
Y22	28346,57
Y23	600739,05
Y24	606,89
Y25	1,13
Y26	1217,34
Y29	5221,14
Y31	805140,96
Y33	7,33
Y34	311,68
Y35	3148,61
Y36	1080,31
Y45	4921,60
Y47	4588,22
Σ	2647397,45

lm2016	R5
Y_	206949,70
Y2	876,60
Y4	3304,66
Y6	5923,13
Y11	4099,57
Y12	96,30
Y16	276,95
Y17	64971,75
Y18	366539,29
Y22	33,28
Y23	3316,18
Y24	10,80
Y29	5576,94
Y31	17306,07
Y34	58312,39
Y35	644,69
Y39	77,52
Y41	278,77
Y42	1259,08
Y47	71177,97
Σ	811031,64

lm2016	R6
Y_	2832,39
Y17	1727,07
Y34	12175,44
Σ	16734,9

lm2016	R7
Y_	17206,11
Y9	1784,70
Y12	307,34
Y16	661,70
Y17	130,18
Y18	205,33
Y41	856,24
Σ	21151,6

lm2016	R8
Y_	14788,51
Y6	181,72
Y22	43,86
Σ	15014,09

lm2016	R9
Y_	219573,40
Y6	506,89
Y8	207386,50
Y9	254218,29
Y12	683,73
Y17	228,90
Y34	134,40
Σ	682732,11

lm2016	R10
Y18	56369,35

lm2016	R11
Y_	18,83
Y9	6018,88
Y16	192,12
Y18	3786,71
Σ	10016,54

lm2016	R12
Y_	157164,67
Y2	285,06
Y3	80,05
Y5	3207,30
Y6	1201,55
Y8	2331,95
Y9	91,80
Y11	781,36
Y12	2719,46
Y13	1551,89
Y17	169,15
Y18	14215,50
Y20	240,00
Y22	750,67
Y23	18,09
Y26	129,64
Y29	1921,71
Y31	16899,20
Y32	47,15
Y34	43186,07
Y35	106,28
Y36	1402,56
Y41	98,16
Y42	257,57
Y46	109241,89
Y47	81284,42
Σ	439383,15

lm2016	R13
Y_	20041,22
Y8	14856,03
Y11	97,87
Y12	110,49
Y13	16,60
Y17	9,18
Y18	6251,39
Y26	48,88
Y29	44,33
Y31	3393,86
Y35	7,54
Y36	2,00
Y41	224,76
Y42	2948,80
Σ	48052,95

4. Final disposal and recovery codes used in export and imports based on waste codes (A)

Table 44: Exports for disposal in 2010, 2013 and 201 6 according to waste codes (A)

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
A1010									569,00						
A1020	1433,65				4017,52					2574,10		215,60		924,92	609,10
A1030									16,81	432,55		3461,15			
A1040									350,65	48,36					
A1050									569,61	10,41		170,00			
A1060					28,00				864,80	49,09					
A1070									226,26						
A1080										535,09					
A1100															
A1110															
A1120															
A1130															
A1140										24,11					
A1160		80,00								170,93					
A1170										54,98					
A1180										26,64					
A1190															
A2010									35,90						
A2020															
A2030										7,97	137,06				
A2050	141074,93									1510,54					206,52
A2060															
A3010															
A3020									654,94	1820,44					
A3030									28,51	33,28					

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
A3040										104,18					
A3050									2517,06	2811,84					1,94
A3070															
A3120										1059,76					
A3140									940,00	45213,89			887,45		18,33
A3150										36869,35			88,96	1,49	1,16
A3160									6,32	3766,63					
A3170										38506,50					
A3180									289,40	115654,83			72,09	99,58	
A3190									4,32	2835,27					
A3200															
A4010	41,06								91,74	38714,93			2130,14	14,62	221,88
A4020										5505,18					
A4030									38,16	69206,98		33684,06			0,06
A4040										15,98					
A4050	27,20									181,64		28,70	2757,98	67,44	
A4060								19209,25	2639,48	15928,13					
A4060															
A4070									3353,94	16525,32		57,38	21,02		7,48
A4080									1264,34	334,41					
A4090									3656,57	11801,55			95,16		
A4100	985,49				163,52				7082,98	288,74		6993,13		4122,02	
A4110					15,70				1055,59	1,00					1046,16
A4120										173,06					
A4130									303,38	6744,87					40,47
A4140	30,00				13,68				307,77	39459,76					51,35
A4150										155,80					
A4160										77,84		104,65			
A4190										52,78					

Table 45: Data according to waste codes and export for disposal

A-Code/D-Code	Amount in Mg
A1010	**14502,019**
D9	569,002
Recovery	13933,017
A1020	**136480,1992**
D1	1433,65
D10	2574,1
D12	215,6
D14	924,92
D15	609,1
D5	4017,52
Recovery	126705,3092
A1030	**46878,835**
D10	432,554
D12	3461,151
D9	16,809
Recovery	42968,321
A1040	**399,005**
D10	48,355
D9	350,65
A1050	**28957,097**
D10	10,409
D12	170
D9	569,609
Recovery	28207,079
A1060	**64906,631**
D10	49,088
D5	28
D9	864,802
Recovery	63964,741
A1070	**2887,94**
D9	226,26
Recovery	2661,68
A1080	**49560,245**
D10	535,093
Recovery	49025,152
A1100	**25969,326**
Recovery	25969,326
A1110	**20059,55**
Recovery	20059,55
A1120	**1081,114**
Recovery	1081,114
A1130	**16975,315**
Recovery	16975,315
A1140	**24,109**
D10	24,109
A1160	**437893,9692**
D10	170,928
D2	80
Recovery	437643,0412
A1170	**27597,452**
D10	54,98
Recovery	27542,472
A1180	**79206,458**
D10	26,64
Recovery	79179,818
A1190	**14443,751**
Recovery	14443,751
A2010	**62335,121**
D9	35,9
Recovery	62299,221
A2020	**73,607**
Recovery	73,607
A2030	**48927,09**
D10	7,971
D11	137,06
Recovery	48782,059

A2050	**158373,36**
D1	140647,912
D1	427,015
D10	1510,54
D15	206,515
D5	10226,842
D9	5133,53
Recovery	221,006

A2060	**9153,446**
Recovery	9153,446

A3010	**11,107**
Recovery	11,107

A3020	**256977,5684**
D10	1820,437
D9	654,938
Recovery	254502,1934

A3030	**61,79**
D10	33,282
D9	28,508

A3040	**1572,12**
D10	104,18
Recovery	1467,94

A3050	**8659,596**
D10	2811,839
D15	1,94
D9	2517,063
Recovery	3328,754

A3070	**645,54**
Recovery	645,54

A3120	**22621,273**
D10	1059,76
Recovery	21561,513

A3140	**218597,7956**
D10	45213,8949
D13	887,45
D15	18,33
D9	940
Recovery	171538,1207

A3150	**42204,413**
D10	36869,349
D13	88,96
D14	1,492
D15	1,16
Recovery	5243,452

A3160	**7884,668**
D10	3766,626
D9	6,316
Recovery	4111,726

A3170	**38866,3693**
D10	38506,4993
Recovery	359,87

A3180	**124808,143**
D10	115654,829
D13	72,09
D14	99,58
D9	289,4
Recovery	8692,244

A3190	**9394,54**
D10	2835,27
D9	4,32
Recovery	6554,95

A3200	**24506,562**
Recovery	24506,562

A4010	**89892,20563**
D1	41,06
D10	38714,926
D13	2130,14
D14	14,62
D15	221,88
D9	91,738
Recovery	48677,84163

A4020	**7040,227**
D10	5505,176
Recovery	1535,051

A4030	**131076,432**
D10	69206,982
D12	33684,06
D15	0,06
D9	38,16
Recovery	28147,17

A4040	**15,98**
D10	15,98

A4050	**50876,454**
D1	27,2
D10	181,636
D12	28,7
D13	2757,98
D14	67,44
Recovery	47813,498

A4060	**192173,0833**
D10	15928,127
D8	19209,25
D9	2639,476
Recovery	154396,2303

A4060	**19,932**
Recovery	19,932

A4070	**42825,543**
D10	16525,319
D12	57,38
D13	21,02
D15	7,48
D9	3353,939
Recovery	22860,405

A4080	**1705,455**
D10	334,405
D9	1264,34
Recovery	106,71

A4090	**117423,5376**
D10	11801,549
D13	95,16
D8	535,04
D9	3656,571
Recovery	101870,2576

A4100	**583820,48**
D1	985,485
D10	288,74
D12	6993,13
D14	4122,02
D5	163,52
D9	7082,98
Recovery	564184,605

A4110	**24760,242**
D10	1
D15	1046,16
D5	15,7
D9	1055,591
Recovery	22641,791

A4120	**173,063**
D10	173,063

A4130	**16380,165**
D10	6744,866
D15	40,47
D9	303,376
Recovery	9291,453

A4140	**42673,5684**
D1	30
D10	39459,76
D15	51,35
D5	13,68
D9	307,769
Recovery	2811,0094

A4150	**302,491**
D10	155,796
Recovery	146,695

A4160	**24639,276**
D10	77,839
D12	104,65
Recovery	24456,787

A4190	**52,78**
D10	52,78

AA010	**94100,32**
Recovery	94100,32
AA060	**1361,1**
D1	1361,1
AA180	**312,3**
Recovery	312,3
AB010	**15337,56**
D10	3026
Recovery	12311,56
AB030	**5860,575**
Recovery	5860,575
AB070	**6789,2**
Recovery	6789,2
AB120	**2,3**
D10	2,3
AB130	**152,416**
Recovery	152,416
AB150	**6066,89**
Recovery	6066,89
AC070	**1850,84**
Recovery	1850,84
AC080	**107,99**
D10	19,85
Recovery	88,14
AC150	**1117,11808**
D10	56,58
Recovery	1060,53808
AC170	**118407,25**
Recovery	118407,25
AC270	**44887,09**
D10	330,32
Recovery	44556,77
AD090	**74,23**
D9	21,61
Recovery	52,62
AD150	**293,84**
Recovery	293,84
B1010	**4711,6**
Recovery	4711,6
B1100	**740,6**
Recovery	740,6
B1220	**17**
Recovery	17
B1240	**749,5**
Recovery	749,5
B2010	**25,8**
Recovery	25,8
B3010	**1522,82**
Recovery	1522,82
B3020	**5307,2**
Recovery	5307,2
B3030	**3,5**
Recovery	3,5
B3080	**933,3**
Recovery	933,3
B3140	**142,4**
Recovery	142,4
B4010	**5975,91**
D5	5000
Recovery	975,91
B1210	**17063,9**
Recovery	17063,9

Table 46: Exports for recovery in 2010, 2013 and 2016 according to waste codes (A)

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
A1010				12438,13									1494,89
A1020	46,78		661,55	118667,98	7165,38							18,00	145,62
A1030				37179,84	5741,20							29,17	18,11
A1040											1468,12	465,73	
A1050		36,98	16778,33	16759,05	9457,92								
A1060	23,84		128,30	6621,39	54011,01	2607,87						298,50	273,83
A1070				2649,26	12,42								
A1080			42983,45	5062,77	179,93					799,00			
A1100			186,03	24681,66									1101,64
A1110				0,55									20059,00
A1120				1081,11									
A1130				15312,19	1528,05	113,48							21,60
A1140													
A1160	725,24	998,03	7067,38	416553,16	9457,92						1468,12	465,73	
A1170				23780,51	9,62							3751,32	1,02
A1180	101,14		9524,88	29843,39	6324,35							32733,33	652,73
A1190	65,30			5395,05								8983,40	
A2010	93,60		270,46	9692,42	51844,76							397,98	
A2020	73,61												
A2030	7,84	27,01	67,33	25706,32	644,58			22147,27				142,24	39,48
A2050				121,01								100,00	
A2060				9153,45									
A3010	11,11												
A3020	27023,39		6156,76	1858,47					199537,33			16614,95	3311,29
A3030													
A3040	419,46	10,64	35,06	45,67		5,13			951,99				
A3050	787,10	14,90	643,29	241,63	1184,46								457,36

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
A3070		414,38			208,02				23,14				
A3120	3961,42		7099,20		3173,98								7326,91
A3140	97722,12	43039,07	9944,12	2974,07	760,42	49,76						8422,96	8728,36
A3150	603,38	3096,74	308,75	145,78	983,38							73,66	31,76
A3160	957,86		919,13						2225,94			8,80	
A3170					359,87								
A3180	1755,00	39,85		5570,07	1075,00							265,70	
A3190	1224,29		657,95		269,10				4403,61				
A3200	339,40				24167,16								
A4010	1786,81	17509,30	628,47	2550,24	5000,20	379,22	68,80		20026,50			728,31	
A4020	1500,05		17,69	4,00								13,54	
A4030	27,17				28120,00								
A4040													
A4050	17428,77			109,24	30171,10							104,38	
A4060	28289,29	6571,17	44706,46	19,93	23321,55				35490,03			14014,87	2099,00
A4070	10066,80	1150,27	4941,59	1022,00	139,30		44,84	10,06			582,36	4714,95	188,24
A4080												106,71	
A4090	2417,51		174,23	27473,78	58985,63	12333,56						493,34	
A4099													
A4100			22,86	500308,32	53789,75						8602,83	127,54	1333,31
A4110	1321,60				13347,97							7972,22	
A4120													
A4130	293,88	115,05	4996,90	2411,31								1397,18	118,84
A4140	1855,76		213,76	206,06	190,97							331,63	12,83
A4150			146,70										
A4160			275,72	31,71	551,80		23594,79						2,77
A4190													

Table 47: Data according to waste codes and export for recovery

A-Code/R-Code	Amount in Mg
A1010	**14502,019**
R13	1494,888
R4	12438,129
Disposal	569,002
A1020	**136480,1992**
R1	46,78
R12	18,002
R13	145,62
R3	661,546
R4	118667,981
R5	7165,3802
Disposal	9774,89
A1030	**46878,835**
R12	29,171
R13	18,11
R4	37179,844
R5	5741,196
Disposal	3910,514
A1040	**399,005**
Disposal	399,005
A1050	**28957,097**
R11	1468,12
R12	465,73
R2	36,98
R4	16759,05
R4	19,279
R5	9457,92
Disposal	750,018
A1060	**64906,631**
R1	23,84
R12	298,5
R13	273,83
R3	128,3
R4	6621,391
R5	54011,01
R6	2607,87
Disposal	941,89

A-Code/R-Code	Amount in Mg
A1070	**2887,94**
R4	2649,26
R5	12,42
Disposal	226,26
A1080	**49560,245**
R10	799
R3	42983,452
R4	5062,77
R5	179,93
Disposal	535,093
A1100	**25969,326**
R13	1101,64
R3	186,03
R4	24681,656
A1110	**20059,55**
R13	20059
R4	0,55
A1120	**1081,114**
R4	1081,114
A1130	**16975,315**
R13	21,6
R4	15312,185
R5	1528,05
R6	113,48
A1140	**24,109**
Disposal	24,109
A1160	**437893,9692**
R1	725,24
R12	1442,774
R13	7497,37
R2	998,034
R3	7067,381
R4	416078,3402
R4	474,822
R5	3281,12
R9	77,96

A-Code/R-Code	Amount in Mg
Disposal	250,928
A1170	**27597,452**
R12	3751,323
R13	1,021
R4	23780,511
R5	9,617
Disposal	54,98
A1180	**79206,458**
R1	101,138
R12	32733,332
R13	652,73
R3	9524,876
R4	28843,389
R4	1000
R5	6324,353
Disposal	26,64
A1190	**14443,751**
R1	65,3
R12	8983,398
R4	5395,053
A2010	**62335,121**
R1	93,6
R12	397,98
R3	270,46
R4	9692,417
R5	51844,764
Disposal	35,9
A2020	**73,607**
R1	73,607
A2030	**48927,09**
R1	7,838
R12	142,24
R13	39,48
R2	27,0085
R3	67,325
R4	25706,3235
R5	644,576
R8	22147,268
Disposal	145,031
A2050	**158373,36**
R12	100
R4	121,006
Disposal	158152,354
A2060	**9153,446**
R4	9153,446
A3010	**11,107**
R1	11,107
A3020	**256977,5684**
R1	27023,39
R12	16614,948
R13	3311,29
R3	6156,759
R4	1858,473
R9	199537,3334
Disposal	2475,375
A3030	**61,79**
Disposal	61,79
A3040	**1572,12**
R1	419,46
R2	10,637
R3	35,06
R4	45,67
R6	5,127
R9	951,986
Disposal	104,18
A3050	**8659,596**
R1	787,104
R12	457,363
R2	14,9
R3	643,292
R4	241,632
R5	1184,463
Disposal	5330,842
A3070	**645,54**
R2	414,38
R5	208,02
R9	23,14

A-Code/R-Code	Amount in Mg
A3120	**22621,273**
R1	3961,42
R12	7326,911
R3	7099,202
R5	3173,98
Disposal	1059,76
A3140	**218597,7956**
R1	97722,115
R12	8422,964
R13	8728,364
R2	43039,065
R3	9944,1207
R4	2974,072
R5	760,42
R6	49,76
Disposal	46956,9149
A3150	**42204,413**
R1	603,38
R12	73,66
R13	31,76
R2	3096,742
R3	308,75
R4	145,78
R5	983,38
Disposal	36960,961
A3160	**7884,668**
R1	957,86
R12	8,8
R3	919,126
R9	2225,94
Disposal	3772,942
A3170	**38866,3693**
R5	359,87
Disposal	38506,4993
A3180	**124808,143**
R1	1755
R12	265,695
R2	39,85
R4	5570,074
R5	1075
Disposal	116102,524

A-Code/R-Code	Amount in Mg
A3190	**9394,54**
R1	1224,29
R3	657,95
R5	269,1
R9	4403,61
Disposal	2839,59
A3200	**24506,562**
R1	339,4
R5	24167,162
A4010	**89892,20563**
R1	1786,813633
R12	728,307
R2	17509,298
R3	628,47
R4	2550,235
R5	5000,198
R6	379,22
R7	68,8
R9	20026,5
Disposal	41214,364
A4020	**7040,227**
R1	1500,05
R12	13,54
R3	17,691
R4	4
Disposal	5504,946
A4030	**131076,432**
R1	27,17
R5	28120
Disposal	102929,262
A4040	**15,98**
Disposal	15,98
A4050	**50876,454**
R1	17428,774
R12	104,38
R4	109,244
R5	30171,1
Disposal	3062,956

A-Code/R-Code	Amount in Mg
A4060	**192173,0833**
R1	28289,2863
R12	14014,87
R13	2099
R2	6571,169
R3	44706,46
R5	23321,554
R9	35490,031
Disposal	37680,713
A4060	**19,932**
R4	19,932
A4070	**42825,543**
R1	10066,802
R11	582,36
R12	4714,953
R13	188,238
R2	1150,272
R3	4941,585
R4	1021,995
R5	139,3
R7	44,84
R8	10,06
Disposal	19965,138
A4080	**1705,455**
R12	106,71
Disposal	1598,745
A4090	**117423,5376**
R1	2417,51
R12	493,34
R3	174,231
R4	27473,77745
R5	58985,626
R6	12333,5601
Disposal	15545,493
A4099	**535,04**
Disposal	535,04
A4100	**583820,48**
R11	8602,83
R12	127,54
R13	1333,31
R3	22,86
R4	500308,315
R5	53789,75
Disposal	19635,875
A4110	**24760,242**
R1	1321,6
R12	7972,22
R5	13347,971
Disposal	2118,451
A4120	**173,063**
Disposal	173,063
A4130	**16380,165**
R1	293,88
R12	1397,183
R13	118,835
R2	115,045
R3	4996,903
R4	2411,307
Disposal	7047,012
A4140	**42673,5684**
R1	1855,7644
R12	331,63
R13	12,83
R3	213,755
R4	206,06
R5	190,97
Disposal	39862,559
A4150	**302,491**
R3	146,695
Disposal	155,796
A4160	**24639,276**
R13	2,774
R3	275,715
R4	31,71
R5	551,8
R7	23594,788
Disposal	182,489

A-Code/R-Code	Amount in Mg
A4190	**52,78**
Disposal	52,78
AA010	**94100,32**
R4	93994,04
R5	106,28
AA060	**1361,1**
Disposal	1361,1
AA180	**312,3**
R4	209,22
R4	103,08
AB010	**15337,56**
R12	12311,56
Disposal	3026
AB030	**5860,575**
R4	4616,305
R5	1244,27
AB070	**6789,2**
R5	6789,2
AB120	**2,3**
Disposal	2,3
AB130	**152,416**
R4	152,416
AB150	**6066,89**
R5	6066,89
AC070	**1850,84**
R12	22,78
R13	0,06
R3	1828
AC080	**107,99**
R3	88,14
Disposal	19,85
AC150	**1117,11808**
R12	363,26
R3	9,951
R4	687,32708
Disposal	56,58
AC170	**118407,25**
R1	40046,76
R12	3453,56
R3	74906,93
AC270	**44887,09**
R1	27886,69
R10	6612,13
R3	387,46
R5	9670,49
Disposal	330,32
AD090	**74,23**
R3	3,66
R4	48,96
Disposal	21,61
AD150	**293,84**
R5	293,84
B1010	**4711,6**
R4	4711,6
B1100	**740,6**
R4	740,6
B1220	**17**
R4	17
B1240	**749,5**
R4	749,5
B2010	**25,8**
R4	25,8
B3010	**1522,82**
R3	1522,82
B3020	**5307,2**
R3	5307,2

A-Code/R-Code	Amount in Mg
B3030	**3,5**
R3	3,5
B3080	**933,3**
R3	933,3
B3140	**142,4**
R3	142,4

A-Code/R-Code	Amount in Mg
B4010	**5975,91**
R3	975,91
Disposal	5000
B1210	**17063,9**
R4	17063,9

Table 48: Imports for disposal in 2010, 2013 and 2016 according to waste codes (A)

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
A1010	19,18								1,04			55,48			
A1020	10407,10								1416,48	824,59		6323,50			1378,20
A1030	516,53								833,77	422,53		5896,30		21,18	
A1040									589,26	11,23		212,56			
A1050	119,73								908,89	4,86		3945,63			300,00
A1060									1092,06	1,78		6,31	2,08		227,59
A1070															
A1080												317,00			
A1100															
A1110										22,00					
A1120															
A1130															
A1160															
A1170					223,00					54,98					
A1180	483,46				57,04					438,10		279,57			
A1190															
A2010	164,28								411,78			145,86			
A2020										10,22					
A2030	137,04									434,55					
A2050	693176,42			15,32	6,60				1006,38			149,07			189,78
A2060	1208,52														
A3010										1237,11					
A3020									2560,90	18717,39					
A3030										33,47					
A3040										74,83					
A3050									314,61	3609,98				223,16	
A3070															

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15
A3120										8997,27					
A3130															
A3140									52,27	67587,58			616,88		1725,19
A3150					5,00				148,66	46128,61			311,68		
A3160									163,52	27179,73					9,28
A3170										5691,29					21,90
A3180									49,72	7377,12		1410,62	0,15	210,85	
A3190										1688,66					
A3200	45738,46														
A4010									265,70	27788,33					56,03
A4020									41,20	5095,04					86,54
A4030									32,16	19730,68		289,38			
A4050	201,70								0,54	321,24		976,75			
A4060	12888,71							4551,00	8653,55	16896,87			2491,86		7878,30
A4070									6657,10	128497,49		37,20	1152,75		31,05
A4080										1214,64					
A4090	26,66								2706,52	3234,87					1,10
A4100	7798,44								5286,75	2298,89		63595,97			214,90
A4110										78,28		408,48			
A4120										223,29		40,70			
A4130									341,02	6748,70		147,39	3,00	87,84	
A4140										13325,72		329,32	10,16	17,94	1315,20
A4150										10,87					
A4160									211,15	155,88		140,06			

Table 49: Data according to waste codes and import disposal

A-Code/D-Code	Amount in Mg
A1010	**17297,502**
D1	19,18
D12	55,475
D9	1,039
Recovery	17221,808
A1020	**211331,384**
D1	10407,1
D10	824,59
D12	6323,5
D15	1378,2
D9	1416,48
Recovery	190981,514
A1030	**36667,01444**
D1	516,528
D10	422,528
D12	5896,295
D14	21,175
D9	833,768
Recovery	28976,72044
A1040	**1780,266**
D10	11,226
D12	212,56
D9	589,26
Recovery	967,22
A1050	**76587,299**
D1	119,73
D10	4,86
D12	3945,634
D15	300
D9	908,891
Recovery	71308,184
A1060	**97121,533**
D10	1,775
D12	6,306
D13	2,078
D15	227,59
D9	1092,06
Recovery	95791,724

A-Code/D-Code	Amount in Mg
A1070	**6271,174**
Recovery	6271,174
A1080	**18832,261**
D12	317
Recovery	18515,261
A1100	**635,418**
Recovery	635,418
A1110	**22**
D10	22
A1120	**53,37**
Recovery	53,37
A1130	**4115,54**
Recovery	4115,54
A1160	**1757427,296**
Recovery	1757427,296
A1170	**8049,456**
D10	54,98
D5	223
Recovery	7771,476
A1180	**234728,948**
D1	483,463
D10	438,098
D12	279,574
D5	57,04
Recovery	233470,773
A1190	**8276,455**
Recovery	8276,455
A2010	**82085,70921**
D1	164,28
D12	145,863
D9	411,78
Recovery	81363,78621

A-Code/D-Code	Amount in Mg
A2020	**10,222**
D10	10,222
A2030	**68674,091**
D1	137,04
D10	434,553
Recovery	68102,498
A2050	**697839,6534**
D1	693176,4244
D12	149,07
D15	189,78
D4	15,32
D5	6,6
D9	1006,38
Recovery	3296,079
A2060	**1208,52**
D1	1208,52
A3010	**12098,847**
D10	1237,108
Recovery	10861,739
A3020	**502555,6942**
D10	18717,39
D9	2560,9
Recovery	481277,4042
A3030	**33,472**
D10	33,472
A3040	**4857,224**
D10	74,831
Recovery	4782,393
A3050	**6485,131**
D10	3609,982
D15	223,16
D9	314,608
Recovery	2337,381
A3070	**144,48**
Recovery	144,48

A-Code/D-Code	Amount in Mg
A3120	**69182,498**
D10	8997,27
Recovery	60185,228
A3130	**328,86**
Recovery	328,86
A3140	**166529,417**
D10	67587,581
D13	616,878
D15	1725,191
D9	52,267
Recovery	96547,5
A3150	**52144,888**
D10	46128,61
D13	311,677
D5	5
D9	148,66
Recovery	5550,941
A3160	**48070,9451**
D10	27179,729
D15	9,28
D9	163,521
Recovery	20718,4151
A3170	**15958,909**
D10	5691,293
D15	21,9
Recovery	10245,716
A3180	**10093,6**
D10	7377,115
D12	1410,62
D13	0,15
D14	210,849
D9	49,72
Recovery	1045,146
A3190	**6064,035**
D10	1688,656
Recovery	4375,379

A-Code/D-Code	Amount in Mg
A3200	**45960,05**
D1	45738,46
Recovery	221,59
A4010	**32288,7499**
D10	27788,3309
D15	56,025
D9	265,704
Recovery	4178,69
A4020	**6800,462**
D10	5095,04
D15	86,54
D9	41,2
Recovery	1577,682
A4030	**21071,938**
D10	19730,684
D12	289,38
D9	32,16
Recovery	1019,714
A4050	**21730,0811**
D1	201,7
D10	321,237
D12	976,75
D9	0,54
Recovery	20229,8541
A4060	**305082,349**
D1	12888,71
D10	16896,866
D13	2491,86
D15	7878,3
D8	4551
D9	8653,553
Recovery	251722,06
A4070	**168367,5471**
D10	128497,489
D12	37,2
D13	1152,751
D15	31,051
D9	6657,1021
Recovery	31991,954

A-Code/D-Code	Amount in Mg
A4080	**1267,41963**
D10	1214,63963
Recovery	52,78
A4090	**110006,9819**
D1	26,66
D10	3234,873
D15	1,1
D9	2706,523
Recovery	104037,8259
A4100	**1258613,519**
D1	7798,44
D10	2298,889
D12	63595,972
D15	214,9
D9	5286,746
Recovery	1179418,572
A4110	**30458,19**
D10	78,28
D12	408,48
Recovery	29971,43
A4120	**264,602**
D10	223,289
D12	40,7
Recovery	0,613
A4130	**22290,3552**
D10	6748,699
D13	147,393
D14	2,996
D15	87,836
D9	341,021
Recovery	14962,4102
A4140	**19522,216**
D10	13325,719
D12	329,321
D13	10,159
D14	17,94
D15	1315,201
D9	801,841
Recovery	3722,035

A-Code/D-Code	Amount in Mg
A4150	**353,066**
D10	10,869
Recovery	342,197
A4160	**7676,439**
D10	155,877
D12	140,06
D9	211,145
Recovery	7169,357
AA010	**46863,052**
D13	4684,89
Recovery	42178,162
AA060	**3025,79**
Recovery	3025,79
AA190	**115,778**
Recovery	115,778
AB030	**4453,005**
D1	2362,8
D12	403,398
D9	90,28
Recovery	1596,527
AB040	**99,96**
Recovery	99,96
AB070	**6825,97**
D1	648,62
D9	2392,36
Recovery	3784,99
AB120	**90,33**
Recovery	90,33
AB130	**3619,521**
D1	22,68
D12	1136,631
Recovery	2460,21
AB150	**12406,9**
D1	31,06
Recovery	12375,84

A-Code/D-Code	Amount in Mg
AC070	**268,49**
Recovery	268,49
AC080	**2276,669**
D10	152,519
Recovery	2124,15
AC150	**6057,581**
D10	511,38
Recovery	5546,201
AC160	**34,323**
D10	0,663
Recovery	33,66
AC170	**1120752,83**
D10	453,53
Recovery	1120299,3
AC250	**666,65**
D10	92,69
D9	573,96
AC270	**240460,758**
D10	173938,33
Recovery	66522,428
AD090	**10014,60483**
D10	1101,162
D13	16,051
D9	17,92
Recovery	8879,47183
AD120	**1279,705**
Recovery	1279,705
B1210, B 1230	**117222,3**
Recovery	117222,3
RB020	**14030,79**
D1	13985,15
Recovery	45,64
B1200	**367532,3**
Recovery	367532,3
B3140	**1311,6**
Recovery	1311,6

Table 50: Imports for recovery in 2010, 2013 and 2016 according to waste codes (A)

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
A1010	53,20			17168,61									
A1020				184910,42	6069,09							2,00	
A1030	11,81			24146,07	4756,59							13,20	49,05
A1040				398,68	568,54								
A1050				54812,54	16095,16							400,49	
A1060			8,14	20721,73	71951,34	2795,81			228,90			55,34	30,46
A1070				6271,17									
A1080				16427,56	2087,70								
A1100				635,42									
A1110													
A1120				53,37									
A1130				4079,74									35,80
A1160	314,11			1732161,96								22328,71	2622,51
A1170	81,00			7518,42								160,05	12,00
A1180	12773,07		18066,53	154292,83	2798,89						206,86	45120,61	211,99
A1190				7426,91								324,42	525,13
A2010				3431,10	77912,69							20,00	
A2020													
A2030				35722,24	708,12			30598,21				116,38	957,54
A2050		1074,65		2121,92	5,79							86,40	7,32
A2060													
A3010				10861,74									
A3020	34056,84	17,44	79,64	20138,90	1911,74				384998,11			4395,96	35678,77
A3030													
A3040	236,24			42,00	2795,33				1708,82				
A3050	139,83	540,00	1067,52									590,03	
A3070			144,48										

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
A3120	34282,77		8884,94	6659,93	8654,39							1703,20	
A3130	25,00			303,86									
A3140	23078,60	62062,87	2806,43	19,66	357,98							913,27	7307,21
A3150	899,56	3155,73	1170,08	188,00								87,00	50,57
A3160	946,95	23,30	18321,57	149,36	604,24	673,00							
A3170	6388,90		3512,47		344,35								
A3180	494,04			596,37								42,44	
A3190	264,50				822,38				2886,30			19,46	382,74
A3200					221,59								
A4010	1281,37		1587,71	19,25	222,76							64,89	1002,71
A4020	625,73			5,50								946,45	
A4030	5,98		183,98	687,45	142,30								
A4050	18029,68			128,94	1973,73	21,08						76,42	
A4060	7147,59	17,70	83872,10	72,23	21603,94				128209,28			10706,01	93,21
A4070	8586,07	1450,80	6528,76	3386,34	179,57						321,60	11499,13	39,68
A4080				40,60									12,18
A4090	275,33		6847,75	8193,18	64752,04	23275,06			134,40			556,79	3,28
A4100	174,58		6679,00	562299,30	591032,68							17900,16	1332,86
A4110					23118,65							6852,78	
A4120	0,61										256,44	1196,07	214,83
A4130	3346,50	739,84	1688,70	7520,04									
A4140	494,37		88,79	532,94	132,21							2018,36	455,36
A4150	7,20											335,00	
A4160			230,44	139,62	11,04		6308,47					467,94	11,85

Table 51: Data according to waste codes and import for recovery

A-Code/R-Code	Amount in Mg
A1010	**17297,502**
R1	53,2
R4	17168,608
Disposal	75,694
A1020	**211331,384**
R12	2
R4	184910,424
R5	6069,09
Disposal	20349,87
A1030	**36667,01444**
R1	11,807
R12	13,2
R13	49,047
R4	24146,07384
R5	4756,5926
Disposal	7690,294
A1040	**1780,266**
R4	398,68
R5	568,54
Disposal	813,046
A1050	**76587,299**
R12	400,486
R4	54812,541
R5	16095,157
Disposal	5279,115
A1060	**97121,533**
R12	55,343
R13	30,46
R3	8,14
R4	20721,733
R5	71951,338
R6	2795,81
R9	228,9
Disposal	1329,809
A1070	**6271,174**
R4	6271,174

A-Code/R-Code	Amount in Mg
A1080	**18832,261**
R4	16427,561
R5	2087,7
Disposal	317
A1100	**635,418**
R4	635,418
A1110	**22**
Disposal	22
A1120	**53,37**
R4	53,37
A1130	**4115,54**
R13	35,8
R4	4079,74
A1160	**1757427,296**
R1	314,11
R12	22328,712
R13	2622,512
R4	1732161,962
A1170	**8049,456**
R1	81
R12	160,053
R13	12
R4	7518,423
Disposal	277,98
A1180	**234728,948**
R1	12773,07
R11	206,86
R12	45120,606
R13	211,99
R3	18066,528
R4	154292,831
R5	2798,888
Disposal	1258,175

A-Code/R-Code	Amount in Mg
A1190	**8276,455**
R12	324,42
R13	525,13
R4	7426,905
A2010	**82085,70921**
R12	20
R4	3431,101
R5	77912,68521
Disposal	721,923
A2020	**10,222**
Disposal	10,222
A2030	**68674,091**
R12	116,383
R13	957,543
R4	35722,242
R5	708,117
R8	30598,213
Disposal	571,593
A2050	**697839,6534**
R12	86,4
R13	7,323
R2	1074,649
R4	2121,922
R5	5,785
Disposal	694543,5744
A2060	**1208,52**
Disposal	1208,52
A3010	**12098,847**
R4	10861,739
Disposal	1237,108
A3020	**502555,6942**
R1	33400,283
R1	656,56
R12	4395,96
R13	35678,773
R2	17,44
R3	79,64
R4	20138,895
R5	1911,74
R9	384998,1132
Disposal	21278,29
A3030	**33,472**
Disposal	33,472
A3040	**4857,224**
R1	236,24
R4	42
R5	2795,33
R9	1708,823
Disposal	74,831
A3050	**6485,131**
R1	139,832
R12	590,0289998
R2	540
R3	1067,52
Disposal	4147,75
A3070	**144,48**
R3	144,48
A3120	**69182,498**
R1	34282,77
R12	1703,2
R3	8884,942
R4	6659,926
R5	8654,39
Disposal	8997,27
A3130	**328,86**
R1	25
R4	303,86
A3140	**166529,417**
R1	23078,6
R12	913,27
R13	7307,213
R2	62062,866
R3	2806,43
R4	19,66
R5	357,98
Disposal	69983,398

A-Code/R-Code	Amount in Mg
A3150	**52144,888**
R1	899,56
R12	87
R13	50,57
R2	3155,731
R3	1170,08
R4	188
Disposal	46593,947
A3160	**48070,9451**
R1	946,95
R2	23,3
R3	18321,5651
R4	149,36
R5	604,24
R6	673
Disposal	27352,53
A3170	**15958,909**
R1	6388,9
R3	3512,466
R5	344,35
Disposal	5713,193
A3180	**10093,6**
R1	494,04
R12	42,44
R4	596,366
Disposal	8960,754
A3190	**6064,035**
R1	264,499
R12	19,46
R13	382,74
R5	822,38
R9	2886,3
Disposal	1688,656
A3200	**45960,05**
R5	221,59
Disposal	45738,46
A4010	**32288,7499**
R1	1281,37
R12	64,89
R13	1002,71
R3	1587,706
R4	19,254
R5	222,76
Disposal	28110,0599
A4020	**6800,462**
R1	625,734
R12	946,448
R4	5,5
Disposal	5222,78
A4030	**21071,938**
R1	5,982
R3	183,98
R4	687,452
R5	142,3
Disposal	20052,224
A4050	**21730,0811**
R1	18029,6801
R12	76,42
R4	128,944
R5	1973,73
R6	21,08
Disposal	1500,227
A4060	**305082,349**
R1	7147,59
R12	10706,011
R13	93,21
R2	17,7
R3	83872,104
R4	72,232
R5	21603,938
R9	128209,275
Disposal	53360,289
A4070	**168367,5471**
R1	8586,073
R11	321,6
R12	11499,1321
R13	39,68
R2	1450,798
R3	6528,763
R4	3386,3399
R5	179,568

A-Code/R-Code	Amount in Mg
Disposal	136375,5931
A4080	**1267,41963**
R13	12,18
R4	40,6
Disposal	1214,63963
A4090	**110006,9819**
R1	275,33
R12	556,7919999
R13	3,277
R3	6847,75
R4	8193,1779
R5	64752,036
R6	23275,063
R9	134,4
Disposal	5969,156
A4100	**1258613,519**
R1	174,58
R12	17900,156
R13	1332,86
R3	6679
R4	562299,3013
R5	591032,675
Disposal	79194,947
A4110	**30458,19**
R12	6852,78
R5	23118,65
Disposal	486,76
A4120	**264,602**
R1	0,613
Disposal	263,989
A4130	**22290,3552**
R1	3266,501
R1	80
R11	256,44
R12	1196,067
R13	214,831
R2	739,8352
R3	1688,695
R4	7520,041
Disposal	7327,945

A-Code/R-Code	Amount in Mg
A4140	**19522,216**
R1	494,372
R12	2018,362
R13	455,36
R3	88,79
R4	532,94
R5	132,211
Disposal	15800,181
A4150	**353,066**
R1	7,197
R12	335
Disposal	10,869
A4160	**7676,439**
R12	467,94
R13	11,85
R3	230,44
R4	139,622
R5	11,04
R7	6308,465
Disposal	507,082
AA010	**46863,052**
R4	39070,602
R5	3107,56
Disposal	4684,89
AA060	**3025,79**
R4	2384,98
R5	640,81
AA190	**115,778**
R4	46,87
R5	68,908
AB030	**4453,005**
R12	247
R3	10,62
R4	1249,407
R5	89,5
Disposal	2856,478

A-Code/R-Code	Amount in Mg
AB040	**99,96**
R5	99,96
AB070	**6825,97**
R4	1040,67
R5	2744,32
Disposal	3040,98
AB120	**90,33**
R4	90,33
AB130	**3619,521**
R4	1702,306
R5	757,904
Disposal	1159,311
AB150	**12406,9**
R5	12375,84
Disposal	31,06
AC070	**268,49**
R3	268,49
AC080	**2276,669**
R2	104,98
R3	1661,17
R5	358
Disposal	152,519
AC150	**6057,581**
R12	955,676
R13	248,38
R2	5,591
R3	381,582
R4	3954,972
Disposal	511,38
AC160	**34,323**
R13	33,66
Disposal	0,663
AC170	**1120752,83**
R1	878654,7571
R12	87883,838
R13	14178,841
R3	138588,882
R4	992,982
Disposal	453,53
AC250	**666,65**
Disposal	666,65
AC270	**240460,758**
R1	17310,924
R10	28102,094
R12	529,64
R13	899,91
R3	17875,52
R5	1804,34
Disposal	173938,33
AD090	**10014,60483**
R11	239,34
R13	0,328
R4	356,34383
R5	8258,66
R7	24,8
Disposal	1135,133
AD120	**1279,705**
R3	1277,1
R4	2,605
B1210, B 1230	**117222,3**
R4	117222,3
RB020	**14030,79**
R5	45,64
Disposal	13985,15
B1200	**367532,3**
R4	367532,3
B3140	**1311,6**
R3	1311,6

Table 52: Use of R/D combinations by Parties

UN region	Export for disposal	Import for disposal	Exports for recovery	Import for recovery
2010				
Africa	SZ	ZA	DZ, MA, SZ	
Asia			AE, AZ, CN, OM, SG	AZ
CEE	LV, SI		BG, CZ, EE, LT, LV, PL, SK, SI, RS	BG, CZ, HU, LT, PL, SK
GRULAC			DO	
WEOG	DK, GR, IE, MT, PT, SE	DE, DK, ES, FI, GB, NZ, SE,	DE, DK, ES, FI, GB, GR, IE, IL, MT NZ, Pt, SE	DE, DK, ES, GB, LU, NZ, PT, SE,
2013				
Africa				
Asia			PH	
CEE	SI		BG, EE, HR, HU, LT, RO, SI, UY	HU, LV, RO, SI
GRULAC				
WEOG	GR, IE, SI	DE, NZ	DE, GB, GR, IE, IT, NZ, SE	AU, DE, GB, SE
2016				
Africa	TN, SZ		CD, CV, TN, SZ	
Asia	LB, AE		AE, SG, PH, YE	SG
CEE	LT, HR, EE,	PL	BG, BA, CZ, EE, GE, HR, HU, LT, LV, SI, SK,	BG, CZ, EE, HU, LT, LV, SK,
GRULAC			AR, NI, SV	
WEOG	AD, GR	DE, ES, PT, SE	AD, AU, DE, ES, GR, IL, IS, IT, MT, NZ, PT, SE	DE, GR, IT, ES, PT, SE