

Ovaj prijevod sadrži:

45 stranica / 85 listova

Br. OV: 463/19

Datum: 16. 12. 2019.

Ovjereni prijevod s engleskog jezika



Paulina Jakšić



Prilog 4.

Sadržaj otpada i predviđanja za buduću proizvodnju otpada



TABLICA SADRŽAJA

1. Uvod	1
2. Morfološki sastav miješanog komunalnog otpada.....	1
2.1. Rezultati analize sastava dobiveni na temelju razdoblja uzorkovanja 17. – 22. 11. 2014.	3
2.2. Rezultati analize sastava dobiveni na temelju razdoblja uzorkovanja 13. – 18. 10. 2014.	7
2.3. Rezultati analize sastava dobiveni na temelju razdoblja uzorkovanja 25. – 29. 8. 2014.	11
2.4. Rezultati analize sastava dobiveni na temelju razdoblja uzorkovanja 4. – 9. 8. 2014.	15
2.5. Sažetak analize sastava otpada dobivenog na temelju četiriju razdoblja uzorkovanja	19
2.6. Konačni rezultati analize sastava otpada	24
3. Izračuni ukupne proizvodnje komunalnog otpada u Splitsko-dalmatinskoj županiji po pretovornoj stanici	31
4. ANALITIČKI izračuni CILJEVA NA TEMELJU NPGO-a RC-A ZA RAZDOBLJE 2017. – 2022. TE OTPADA KOJI ĆE BITI OBRAĐEN U CGO-u U OPĆINI LEČEVICA.....	35

POPIS TABLICA

Tablica 1: Analiza sastava otpada (17. – 22. 11. 2014.).....	3
Tablica 2: Ponovna procjena analize sastava otpada (17. – 22. 11. 2014.) uzimajući u obzir pretpostavke za frakciju < 20 mm iz analize sastava otpada u Zadarskoj županiji	4
Tablica 3: Ponovna procjena analize sastava otpada (17. – 22. 11. 2014.) uzimajući u obzir pretpostavke za frakciju < 20 mm iz analize sastava otpada u Šibensko-kninskoj županiji.....	5
Tablica 4: Ponovna procjena analize sastava otpada (17. – 22. 11. 2014.) uzimajući u obzir pretpostavke za frakciju < 20 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije	6
Tablica 5: Analiza sastava otpada (13. – 18. 10. 2014.).....	7
Tablica 6: Ponovna procjena analize sastava otpada (13. – 18. 10. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Zadarskoj županiji	8
Tablica 7: Ponovna procjena analize sastava otpada (13. – 18. 10. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji.....	9
Tablica 8: Ponovna procjena analize sastava otpada (13. – 18. 10. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije	10
Tablica 9: Analiza sastava otpada (25. – 29. 8. 2014.).....	11
Tablica 10: Ponovna procjena analize sastava otpada (25. – 29. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Zadarskoj županiji	12
Tablica 11: Ponovna procjena analize sastava otpada (25. – 29. 8. 2014.) uzimajući u obzir pretpostavke za	





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

frakciju < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji.....	13
Tablica 12: Ponovna procjena analize sastava otpada (25. – 29. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije	14
Tablica 13: Analiza sastava otpada (04. – 9. 8. 2014.).....	15
Tablica 14: Ponovna procjena analize sastava otpada (4. – 9. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Zadarskoj županiji	16
Tablica 15: Ponovna procjena analize sastava otpada (04. – 9. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije	18
Tablica 16: Tablica sažetka koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Zadarskoj županiji	19
Tablica 17: Tablica sažetka s detaljima koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Zadarskoj županiji.....	20
Tablica 18: Tablica sažetka koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji	21
Tablica 19: Tablica sažetka s detaljima koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji	21
Tablica 20: Tablica sažetka koja u obzir uzima frakcije < 20 mm i < 40 mm iz srednjih vrijednosti analize sastava otpada u Šibensko-kninskoj i Zadarskoj županiji.....	23
Tablica 21: Tablica sažetka s detaljima koja u obzir uzima frakcije < 20 mm i < 40 mm iz srednjih vrijednosti analize sastava otpada u Šibensko-kninskoj i Zadarskoj županiji.....	23
Tablica 22: Analiza prosječnog sastava otpada za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja	24
Tablica 23: Analiza prosječnog sastava otpada s detaljima za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja	25
Tablica 24: Analiza prosječnog sastava otpada za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Šibensko-kninsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja	27
Tablica 25: Analiza prosječnog sastava otpada s detaljima za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Šibensko-kninsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja	27
Tablica 26: Analiza prosječnog sastava otpada za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz srednje vrijednosti iz Izvješća o analizi za Šibensko-kninsku i Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja	28
Tablica 27: Analiza prosječnog sastava otpada s detaljima za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz srednje vrijednosti iz Izvješća o analizi za Šibensko-kninsku i Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja	29
Tablica 28: Pregled pretovarnih stanica	31
Tablica 29: Predviđena proizvodnja komunalnog otpada za gradove/općine Trogir, Seget, Okrug i Marina	33
Tablica 30: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine kojima će služiti pretovarna stanica Split	33





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Tablica 31: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine kojima će služiti pretovarna stanica Sinj.....	33
Tablica 32: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine kojima će služiti pretovarna stanica Zagvozd	33
Tablica 33: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine kojima će služiti pretovarna stanica Brač	33
Tablica 34: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine kojima će služiti pretovarna stanica Vis.....	33
Tablica 35: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine kojima će služiti pretovarna stanica Hvar	34
Tablica 36: Predviđanja u pogledu proizvodnje komunalnog otpada za gradove/općine koji će biti izravno prevezen u CGO bez pretovarne stanice.....	34
Tablica 37: Predviđanja u pogledu proizvodnje komunalnog otpada za cjelokupnu Splitsko-dalmatinsku županiju.....	34



1. UVOD

U ovom prilogu nalaze se analitički izračuni i pretpostavke koje su upotrijebljene kako bi se provela analiza prosječnog sadržaja otpada. Osim toga, ovaj prilog sadržava i pretpostavke za ponovni izračun količina glomaznog otpada te analitičke izračune za proizvodnju otpada u Splitsko-dalmatinskoj županiji, uzimajući u obzir srednji scenarij za predviđanja u pogledu stanovništva i brzine proizvodnje otpada po pretovornoj stanici koje će služiti za potrebe određenih gradova, odnosno općina.

2. MORFOLOŠKI SASTAV MIJEŠANOG KOMUNALNOG OTPADA

Kako je spomenuto u glavnom dijelu teksta, tijekom provedbe projekta provedena su četiri uzorkovanja u sljedećim razdobljima

- 17. – 22. 11. 2014.
- 13. – 18. 10. 2014.
- 25. – 29. 8. 2014.
- 4. – 9. 8. 2014.

Prije uzorkovanja lokacije odlagališta poredane su prema sljedećim specifikacijama:

1. Postotak obuhvaćanja urbanih i ruralnih regija
2. Ukupna veličina uzorka > 75 % ukupne proizvodnje komunalnog miješanog otpada na promatranom području
3. Uzorkovanje u regijama u kojima se očekuje velika proizvodnja materijala koji je moguće reciklirati
4. Dostupnost svakog odlagališta tijekom razdoblja uzorkovanja.

U skladu s navedenim zahtjevima odabrane su sljedeće lokacije za uzorkovanje:

„Karepovac” – Split, „Stanišće” – Hvar, „Košer” – Brač, „Kozjačić” – Imotski, „Mojanka” – Sinj, „Ajdanovac” – Vrgorac i „Poljanak” – Vrlika. Uzorkovanje je provedeno u razdobljima između 4. i 10. te 25. i 29. kolovoza, 13. i 18. listopada i 17. i 22. studenoga.

Uzorkovanje je provedeno na lokaciji Karepovac tijekom sedam dana, na lokaciji Stanišće tijekom četiri dana, na lokaciji Košer tijekom šest dana, na lokaciji Mojanka tijekom šest dana, na lokaciji Poljanak tijekom jednog dana, na lokaciji Kozjačić tijekom četiri dana te na lokaciji Ajdanovac tijekom četiri dana.

Tijekom izrade plana uzorkovanja uključena su sva urbana područja, odnosno veći gradovi i manja urbana područja (kako je prikazano u prilogu). U plan su stoga uključene sve specifičnosti ispitnog područja kako bi se dobili što realističniji rezultati te kako bi uzorci bili maksimalno reprezentativni. Uzorkovanje komunalnog otpada u sedam odlagališta obuhvaća približno 86 % stanovništva (391.268) ili približno 88 % komunalnog otpada u županiji (161.130 t). Postotak urbanog stanovništva obuhvatio je približno 78 % i približno 22 % ruralnog. Na temelju tih podataka dodjeljuje se ponderirani faktor izmjerenim vrijednostima komponenti otpada u uzorcima u izračunu postotka svake komponente.

Tijekom pražnjenja vozila i uzorkovanja u obzir je uzeta činjenica da bi uzorak trebao biti maksimalno heterogen na način da je uzet vertikalno, od vrha prema dnu. Reprezentativni uzorak izolirane količine otpada dobiven je metodom četvorenja. Nakon miješanja uzorak se oblikuje u stožastu hrpu koja se zatim spljošćuje i dijeli na četiri jednaka dijela. Dvije nasuprotne četvrtine odvajaju se, a dvije preostale četvrtine ponovno se miješaju. Postupak se ponavlja dok se ne dobije uzorak potrebne veličine. Metodologija je podešena u skladu s Dodatkom 5. Pravilniku o načinima





i uvjetima odlaganja otpada, kategorijama i uvjetima rada za odlagališta otpada (Narodne novine br. 114/15).

Metodologija je osmišljena u skladu s postojećom metodologijom i iskustvom u Europskoj uniji te prilagođena trenutačnim uvjetima u Županiji te društvenoj i gospodarskoj strukturi Županije. Metodologija sortiranja otpada zahtijeva utvrđivanje vrsta otpada, karakteristika različitih vrsta otpada, količine otpada u promatranom uzorku i postotnog udjela različitih vrsta otpada u ukupnoj količini otpada.

Metoda analize otpada može se opisati na sljedeći način:

- Uzorak otpada prenosi se na rešetku gdje se ručno sortira i prosijava kroz tri rešetke, veličine iznad 100 mm, 40 – 100 mm i manje od 40 mm.
- Nakon sortiranja svaka frakcija zasebno se važe. Rezultat analize jest količina otpada u svakoj kategoriji.
- Rezultati se bilježe u poseban obrazac koji sadržava sljedeće podatke: datum uzorkovanja, podrijetlo otpada (županiju iz koje je otpad primljen), ukupnu količinu otpada u kamionu te informacije o neto težini svake frakcije otpada.

U tablici prikazana je količina ukupnog odloženog otpada, gdje je uzorkovanje provedeno, u županiji te količina odloženog komunalnog otpada u 2012. Posljednji stupac predstavlja broj stanovnika obuhvaćenih uzorkovanjem.

Odlagalište	Ukupna količina odloženog otpada(t)	Miješani komunalni otpad(t)	Broj stanovnika
Ajdanovac /Vrgorac/	2968	2968	6501
Košer /Brač/	4902	4298	9891
Karepovac /Split/	121.611	108.618	292.094
Kozjačić /Imotski/	10.350	10.300	26.272
Mojanka /Sinj/	30.724	30.242	48.349
Poljanak /Vrlika/	261	211	2159
Stanišće /Hvar/	4493	4493	4493





2.1. REZULTATI ANALIZE SASTAVA DOBIVENI NA TEMELJU RAZDOBLJA UZORKOVANJA 17. – 22. 11. 2014.

Tablica 1: Analiza sastava otpada (17. – 22. 11. 2014.)

Diapers	4.7%
Metal Fe	2.2%
Metal Al	0.9%
Wood	1.1%
Textile	4.1%
Paper	9.7%
Tetrapak	5.8%
Cardboard	5.1%
Glass	4.4%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	5.0%
Rubber-Leather	1.1%
Organic waste	19.5%
Garden waste	2.8%
Inert waste	2.0%
Hazardous fraction of municipal waste	1.2%
fraction < 20 mm	16.0%
Total	100.0%

Tekst iz tablice: - Pelene, - Metal Fe, - Metal Al, - Drvo, - Tekstil, - Papir, - Tetrapak, Karton, Staklo, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Guma – Koža, Organski otpad, Vrtni otpad, Inertni otpad, Opasne frakcije komunalnog otpada, frakcija < 20 mm, Ukupno

Kako bi se utvrdila frakcija otpada < 20 mm koja je predstavljena u prethodnoj tablici, sljedeće pretpostavke uzete su u obzir:

- Pretpostavke u pogledu frakcije < 20 mm prema analizi sastava otpada u Zadarskoj županiji (proljeće 2014.)



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Tekst iz tablice: Papir i karton, Plastika, Staklo, Metal, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Koža i kosti, Vrtni otpad, Organski otpad, Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 2: Ponovna procjena analize sastava otpada (17. – 22. 11. 2014.) uzimajući u obzir pretpostavke za frakciju < 20 mm iz analize sastava otpada u Zadarskoj županiji

Organic waste	29.6%
Garden waste	3.8%
Paper	10.7%
Cardboard	5.1%
Tetrapak	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	6.1%
Metals Fe	2.6%
Metals Al	1.1%
Glass	5.0%
Wood	1.1%
Textile	4.1%
Rubber-Leather	1.1%
Bones	0.2%
Inert waste	3.4%
Hazardous fraction of municipal waste	1.2%
Diapers	4.7%
Total	100.0%

Organski otpad, Vrtni otpad, Papir, Karton, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Inertni otpad, Opasne frakcije komunalnog otpada, Pelene, Ukupno

- Pretpostavke u pogledu frakcije < 20 mm prema analizi sastava otpada u Šibensko-kninskoj županiji (proljeće 2014.)





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 3: Ponovna procjena analize sastava otpada (17. – 22. 11. 2014.) uzimajući u obzir pretpostavke za frakciju < 20 mm iz analize sastava otpada u Šibensko-kninskoj županiji

Organic waste	24.6%
Garden waste	5.2%
Paper	10.4%
Cardboard	5.1%
Tetrapak	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	5.2%
Metals Fe	2.3%
Metals Al	1.0%
Glass	4.8%
Wood	1.2%
Textile	4.1%
Rubber-Leather	1.1%
Bones	0.0%
Inert waste	8.9%
Hazardous fraction of municipal waste	1.2%
Diapers	4.7%
Total	100.0%



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Tekst iz tablice: Organski otpad, Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Inertni otpad, Opasne frakcije komunalnog otpada, Pelene, Ukupno

■ Pretpostavke u pogledu frakcije < 20 mm, srednja vrijednost na temelju studije iz Zadarske i Šibensko-kninske županije

Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 4: Ponovna procjena analize sastava otpada (17. – 22. 11. 2014.) uzimajući u obzir pretpostavke za frakciju < 20 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Organic waste	27.1%
Garden waste	4.5%
Paper	10.6%
Cardboard	5.1%
Tetrapak	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	5.6%
Metals Fe	2.5%
Metals Al	1.0%
Glass	4.9%
Wood	1.1%
Textile	4.1%
Rubber-Leather	1.1%
Bones	0.1%
Inert waste	6.2%
Hazardous fraction of municipal waste	1.2%
Diapers	4.7%
Total	100.0%

Tekst iz tablice: Organski otpad, Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Inertni otpad, Opasne frakcije komunalnog otpada, Pelene, Ukupno

2.2. REZULTATI ANALIZE SASTAVA DOBIVENI NA TEMELJU RAZDOBLJA UZORKOVANJA 13. – 18. 10. 2014.

Tablica 5: Analiza sastava otpada (13. – 18. 10. 2014.)

Metal	3.0%
Wood	2.0%
Textile	7.0%
Paper and cardboard	22.0%
Glass	5.0%
Plastic	21.0%
Rubber	2.0%
Kitchen waste	15.0%
Garden waste	3.0%
Problematic substances (batteries, diapers etc.)	6.0%
fraction < 40 mm	14.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil, Papir i karton, Staklo, Plastika, Guma, Kuhinjski otpad, Vrtni otpad, Problematične tvari (baterije, pelene itd.), frakcija < 40 mm, Ukupno



Kako bi se utvrdila frakcija otpada < 40 mm koja je predstavljena u prethodnoj tablici, sljedeće pretpostavke uzete su u obzir:

- Pretpostavke u pogledu frakcije < 40 mm prema analizi sastava otpada u Zadarskoj županiji (proljeće 2014.)

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Tekst iz tablice: Papir i karton, Plastika, Staklo, Metal, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Koža i kosti, Vrtni otpad, Organski otpad, Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 6: Ponovna procjena analize sastava otpada (13. – 18. 10. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Zadarskoj županiji

Kitchen waste	23.8%
Garden waste	3.8%
Paper and Cardboard	22.9%
Plastics	22.0%
Metals	3.6%
Glass	5.5%
Wood	2.0%
Textile	7.0%
Rubber	2.0%
Skin and Bones	0.2%
Other waste (earth, dust, sand, undefined)	1.2%
Problematic substances (diapers etc.)	6.0%
Total	100.00%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Koža i kosti, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene itd.), Ukupno

- Pretpostavke u pogledu frakcije < 40 mm prema analizi sastava otpada u Šibensko-kninskoj županiji (proljeće 2014.)





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste- Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematične tvari – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 7: Ponovna procjena analize sastava otpada (13. – 18. 10. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji

Kitchen waste	19.5%
Garden waste	5.1%
Paper and Cardboard	22.6%
Plastics	21.2%
Metals	3.1%
Glass	5.4%
Wood	2.0%
Textile	7.0%
Rubber	2.0%
Skin and Bones	0.0%
Other waste (earth, dust, sand, undefined)	6.0%
Problematic substances (diapers etc.)	6.0%
Total	100.00%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Koža i kosti, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene itd.), Ukupno





■ Pretpostavke u pogledu frakcije < 40 mm, srednja vrijednost na temelju studije iz Zadarske i Šibensko-kninske županije

Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 8: Ponovna procjena analize sastava otpada (13. – 18. 10. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije

Kitchen waste	21.6%
Garden waste	4.5%
Paper and Cardboard	22.8%
Plastics	21.6%
Metals	3.4%
Glass	5.5%
Wood	2.0%
Textile	7.0%
Rubber	2.0%
Skin and Bones	0.1%
Other waste (earth, dust, sand, undefined)	3.6%
Problematic substances (diapers etc.)	6.0%
Total	100.00%





Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Koža i kosti, Ostali otpad (zemlja, prašina, pljesak, nedefinirano), Problematične tvari (pelene itd.), Ukupno

2.3. REZULTATI ANALIZE SASTAVA DOBIVENI NA TEMELJU RAZDOBLJA UZORKOVANJA 25. – 29. 8. 2014.

Tablica 9: Analiza sastava otpada (25. – 29. 8. 2014.)

Metal	3.0%
Wood	1.0%
Textile	6.0%
Paper and cardboard	21.0%
Glass	5.0%
Plastic	23.0%
Rubber	3.0%
Kitchen waste	15.0%
Garden waste	5.0%
Problematic substances (batteries, diapers etc.)	4.0%
fraction < 40 mm	14.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil, Papir i karton, Staklo, Plastika, Guma, Kuhinjski otpad, Vrtni otpad, Problematične tvari (baterije, pelene itd.), frakcija < 40 mm, Ukupno

Kako bi se utvrdila frakcija otpada < 40 mm koja je predstavljena u prethodnoj tablici, sljedeće pretpostavke uzete su u obzir:

- Pretpostavke u pogledu frakcije < 40 mm prema analizi sastava otpada u Zadarskoj županiji (proljeće 2014.)

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%





Tekst iz tablice: Papir i karton, Plastika, Staklo, Metal, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Koža i kosti, Vrtni otpad, Kuhinjski otpad, Organski otpad, Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 10: Ponovna procjena analize sastava otpada (25. – 29. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Zadarskoj županiji

Kitchen waste	23.8%
Garden waste	5.8%
Paper and Cardboard	21.9%
Plastics	24.0%
Metals	3.6%
Glass	5.5%
Wood	1.0%
Textile	6.0%
Rubber	3.0%
Bones	0.2%
Construction waste	1.2%
Problematic substances (batteries, diapers etc.)	4.0%
Total	100.0%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kost, Građevinski otpad, Problematične tvari (baterije, pelene itd.), Ukupno

- Pretpostavke u pogledu frakcije < 40 mm prema analizi sastava otpada u Šibensko-kninskoj županiji (proljeće 2014.)





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste- Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 11: Ponovna procjena analize sastava otpada (25. – 29. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji

Kitchen waste	19.5%
Garden waste	7.1%
Paper and Cardboard	21.6%
Plastics	23.2%
Metals	3.1%
Glass	5.4%
Wood	1.0%
Textile	6.0%
Rubber	3.0%
Bones	0.0%
Construction waste	6.0%
Problematic substances (batteries, diapers etc.)	4.0%
Total	100.0%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kostji, Građevinski otpad, Problematične tvari (baterije, pelene itd.), Ukupno



■ Pretpostavke u pogledu frakcije < 40 mm, srednja vrijednost na temelju studije iz Zadarske i Šibensko-kninske županije

Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 12: Ponovna procjena analize sastava otpada (25. – 29. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Kitchen waste	21.6%
Garden waste	6.5%
Paper and Cardboard	21.8%
Plastics	23.6%
Metals	3.4%
Glass	5.5%
Wood	1.0%
Textile	6.0%
Rubber	3.0%
Bones	0.1%
Construction waste	3.6%
Problematic substances (batteries, diapers etc.)	4.0%
Total	100.0%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kostii, Građevinski otpad, Problematične tvari (baterije, pelene itd.), Ukupno

2.4. REZULTATI ANALIZE SASTAVA DOBIVENI NA TEMELJU RAZDOBLJA UZORKOVANJA 4. – 9. 8. 2014.

Tablica 13: Analiza sastava otpada (04. – 9. 8. 2014.)

Metal	5.0%
Wood	2.0%
Textile	7.0%
Paper and cardboard	25.0%
Glass	6.0%
Plastic	22.0%
Rubber	3.0%
Kitchen waste	10.0%
Garden waste	4.0%
Problematic substances (batteries, diapers etc.)	5.0%
fraction < 40 mm	11.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil, Papir i karton, Staklo, Plastika, Guma, Kuhinjski otpad, Vrtni otpad, Problematične tvari (baterije, pelene itd.), frakcija < 40 mm, Ukupno

Kako bi se utvrdila frakcija otpada < 40 mm koja je predstavljena u prethodnoj tablici, sljedeće pretpostavke uzete su u obzir:

- Pretpostavke u pogledu frakcije < 40 mm prema analizi sastava otpada u Zadarskoj županiji (proljeće 2014.)



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Tekst iz tablice: Papir i karton, Plastika, Staklo, Metal, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Koža i kosti, Vrtni otpad, Kuhinjski otpad, Organski otpad, Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 14: Ponovna procjena analize sastava otpada (4. – 9. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm iz analize sastava otpada u Zadarskoj županiji

Kitchen waste	16.9%
Garden waste	4.6%
Paper and Cardboard	25.7%
Plastics	22.8%
Metals	5.4%
Glass	6.4%
Wood	2.0%
Textile	7.0%
Rubber	3.0%
Bones	0.1%
Construction waste	0.9%
Problematic substances (batteries, diapers etc.)	5.0%
Total	100.0%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kost, Građevinski otpad, Problematične tvari (baterije, pelene itd.), Ukupno

- Pretpostavke u pogledu frakcije < 40 mm prema analizi sastava otpada u Šibensko-kninskoj županiji (proljeće 2014.)



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste- Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Kitchen waste	13.5%
Garden waste	5.6%
Paper and Cardboard	25.5%
Plastics	22.2%
Metals	5.1%
Glass	6.3%
Wood	2.0%
Textile	7.0%
Rubber	3.0%
Bones	0.0%
Construction waste	4.7%
Problematic substances (batteries, diapers etc.)	5.0%
Total	100.0%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kost, Građevinski otpad, Problematične tvari (baterije, pelene itd.), Ukupno

- Pretpostavke u pogledu frakcije < 40 mm, srednja vrijednost na temelju studije iz Zadarske i Šibensko-kninske županije





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Tekst iz tablice: Metal, Drvo, Tekstil/odjeća, Papir, Staklo, Plastika, Guma, Koža/kosti, Kuhinjski otpad, Vrtni otpad, Problematičan otpad – pelene, Ostali otpad (zemlja, prašina, pijesak itd.), Ukupno

Uzimajući u obzir tu pretpostavku analiza sastava otpada procijenjena je na sljedeći način:

Tablica 15: Ponovna procjena analize sastava otpada (04. – 9. 8. 2014.) uzimajući u obzir pretpostavke za frakciju < 40 mm, srednja vrijednost iz Zadarske i Šibensko-kninske županije

Kitchen waste	15.2%
Garden waste	5.1%
Paper and Cardboard	25.6%
Plastics	22.5%
Metals	5.3%
Glass	6.4%
Wood	2.0%
Textile	7.0%
Rubber	3.0%
Bones	0.1%
Construction waste	2.8%
Problematic substances (batteries, diapers etc.)	5.0%
Total	100.0%

Tekst iz tablice: Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kost, Građevinski otpad, Problematične tvari (baterije, pelene itd.), Ukupno



2.5. SAŽETAK ANALIZE SASTAVA OTPADA DOBIVENOG NA TEMELJU ČETIRIJU RAZDOBLJA UZORKOVANJA

Tablice u nastavku jesu tablice sa sažecima koje predstavljaju četiri analize sastava otpada (uključujući pretpostavke predstavljene u prethodnim odjeljcima) te uključuju i srednju vrijednost dobivenu na temelju analize sastava otpada koja je provedena u razdobljima uzorkovanja 4. –9. 8. 2014. i 25. – 29. 8. 2014.

Tablica 16: Tablica sažetka koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Zadarskoj županiji

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13-18/10/2014	17-22/11/2014
Kitchen waste	16.9%	23.8%	23.8%	23.8%	29.6%
Garden waste	4.6%	5.8%	3.8%	4.8%	3.8%
Paper and Cardboard	25.7%	21.9%	22.9%	22.4%	21.6%
Plastics	22.8%	24.0%	22.0%	23.0%	20.6%
Metals	5.4%	3.6%	3.6%	3.6%	3.7%
Glass	6.4%	5.5%	5.5%	5.5%	5.0%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber	3.0%	3.0%	2.0%	2.5%	1.1%
Skin and bones	0.1%	0.2%	0.2%	0.2%	0.2%
Other waste (earth, dust, sand, undefined)	0.9%	1.2%	1.2%	1.2%	3.4%
Problematic substances (diapers, batteries, etc)	5.0%	4.0%	6.0%	5.0%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Tekst iz tablice: Srednja vrijednost

Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kosti i koža, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene, baterije itd.), Ukupno

Uzimajući u obzir činjenicu da je analiza sastava otpada za razdoblje uzorkovanja 17. – 22. 11. 2015. detaljnije opisana, prethodna tablica može se predstaviti na sljedeći način





Tablica 17: Tablica sažetka s detaljima koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Zadarskoj županiji

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13- 18/10/2014	17-22/11/2014
Organic waste (kitchen waste)	16.9%	23.8%	23.8%	23.8%	29.6%
Garden waste	4.6%	5.8%	3.8%	4.8%	3.8%
Paper	12.8%	10.9%	11.4%	11.2%	10.7%
Cardboard	6.0%	5.1%	5.4%	5.3%	5.1%
Tetrapak	6.9%	5.9%	6.1%	6.0%	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	9.7%	10.3%	9.4%	9.8%	8.8%
LDPE bags	6.3%	6.6%	6.1%	6.4%	5.7%
Other plastics	6.7%	7.1%	6.5%	6.8%	6.1%
Metals Fe	3.8%	2.5%	2.5%	2.5%	2.6%
Metals Al	1.6%	1.0%	1.0%	1.0%	1.1%
Glass	6.4%	5.5%	5.5%	5.5%	5.0%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber-Leather	3.0%	3.0%	2.0%	2.5%	1.1%
Bones	0.1%	0.2%	0.2%	0.2%	0.2%
Other waste (earth, dust, sand, undefined)	0.9%	1.2%	1.2%	1.2%	3.4%
Hazardous fraction of municipal waste	1.0%	0.8%	1.2%	1.0%	1.2%
Diapers	4.0%	3.2%	4.8%	4.0%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Tekst iz tablice: Srednja vrijednost

Organski otpad (kuhinjski otpad), Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Opasne frakcije komunalnog otpada, Pelene, Ukupno

Napomena: crveno označeni postoci izračunani su uzimajući u obzir analizu razdoblja 17. – 22. 11. 2014.





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Tablica 18: Tablica sažetka koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13- 18/10/2014	17-22/11/2014
Kitchen waste	13.5%	19.5%	19.5%	19.5%	24.6%
Garden waste	5.6%	7.1%	5.1%	6.1%	5.2%
Paper and Cardboard	25.5%	21.6%	22.6%	22.1%	21.3%
Plastics	22.2%	23.2%	21.2%	22.2%	19.7%
Metals	5.1%	3.1%	3.1%	3.1%	3.3%
Glass	6.3%	5.4%	5.4%	5.4%	4.8%
Wood	2.0%	1.0%	2.0%	1.5%	1.2%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber	3.0%	3.0%	2.0%	2.5%	1.1%
Skin and bones	0.0%	0.0%	0.0%	0.0%	0.0%
Other waste (earth, dust, sand, undefined)	4.7%	6.0%	6.0%	6.0%	8.9%
Problematic substances (diapers, batteries, etc)	5.0%	4.0%	6.0%	5.0%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Tekst iz tablice: Srednja vrijednost

Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kost i koža, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene, baterije itd.), Ukupno

Tablica 19: Tablica sažetka s detaljima koja u obzir uzima frakcije < 20 mm i < 40 mm iz analize sastava otpada u Šibensko-kninskoj županiji

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13- 18/10/2014	17-22/11/2014
Organic waste (kitchen waste)	13.5%	19.5%	19.5%	19.5%	24.6%
Garden waste	5.6%	7.1%	5.1%	6.1%	5.2%
Paper	12.5%	10.6%	11.1%	10.8%	10.4%
Cardboard	6.1%	5.1%	5.4%	5.3%	5.1%
Tetrapak	6.9%	5.9%	6.2%	6.0%	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	9.9%	10.4%	9.5%	9.9%	8.8%
LDPE bags	6.4%	6.7%	6.1%	6.4%	5.7%
Other plastics	5.9%	6.1%	5.6%	5.9%	5.2%
Metals Fe	3.6%	2.2%	2.2%	2.2%	2.3%
Metals Al	1.5%	0.9%	0.9%	0.9%	1.0%
Glass	6.3%	5.4%	5.4%	5.4%	4.8%
Wood	2.0%	1.0%	2.0%	1.5%	1.2%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber-Leather	3.0%	3.0%	2.0%	2.5%	1.1%
Bones	0.0%	0.0%	0.0%	0.0%	0.0%
Other waste (earth, dust, sand, undefined)	4.7%	6.0%	6.0%	6.0%	8.9%
Hazardous fraction of municipal waste	1.0%	0.8%	1.2%	1.0%	1.2%
Diapers	4.0%	3.2%	4.8%	4.0%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Tekst iz tablice: Srednja vrijednost

Organski otpad (kuhinjski otpad), Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kostí, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Opasne frakcije komunalnog otpada, Pelene, Ukupno

Napomena: crveno označeni postoci izračunani su uzimajući u obzir analizu razdoblja 17. – 22. 11. 2014.



Tablica 20: Tablica sažetka koja u obzir uzima frakcije < 20 mm i < 40 mm iz srednjih vrijednosti analize sastava otpada u Šibensko-kninskoj i Zadarskoj županiji

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13- 18/10/2014	17-22/11/2014
Kitchen waste	15.2%	21.6%	21.6%	21.6%	27.1%
Garden waste	5.1%	6.5%	4.5%	5.5%	4.5%
Paper and Cardboard	25.6%	21.8%	22.8%	22.3%	21.4%
Plastics	22.5%	23.6%	21.6%	22.6%	20.1%
Metals	5.3%	3.4%	3.4%	3.4%	3.5%
Glass	6.4%	5.5%	5.5%	5.5%	4.9%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber	3.0%	3.0%	2.0%	2.5%	1.1%
Skin and bones	0.1%	0.1%	0.1%	0.1%	0.1%
Other waste (earth, dust, sand, undefined)	2.8%	3.6%	3.6%	3.6%	6.2%
Problematic substances (diapers, batteries, etc)	5.0%	4.0%	6.0%	5.0%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Tekst iz tablice: Srednja vrijednost

Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Kosti i koža, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene, baterije itd.), Ukupno

Tablica 21: Tablica sažetka s detaljima koja u obzir uzima frakcije < 20 mm i < 40 mm iz srednjih vrijednosti analize sastava otpada u Šibensko-kninskoj i Zadarskoj županiji

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13- 18/10/2014	17-22/11/2014
Organic waste (kitchen waste)	15.2%	21.6%	21.6%	21.6%	27.1%
Garden waste	5.1%	6.5%	4.5%	5.5%	4.5%
Paper	12.5%	10.7%	11.2%	10.9%	10.6%
Cardboard	6.1%	5.2%	5.4%	5.3%	5.1%
Tetrapak	7.0%	5.9%	6.2%	6.1%	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	10.0%	10.5%	9.6%	10.1%	8.8%
LDPE bags	6.5%	6.8%	6.2%	6.5%	5.7%
Other plastics	5.9%	6.2%	5.7%	6.0%	5.6%
Metals Fe	3.7%	2.4%	2.4%	2.4%	2.5%
Metals Al	1.5%	1.0%	1.0%	1.0%	1.0%
Glass	6.4%	5.5%	5.5%	5.5%	4.9%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber-Leather	3.0%	3.0%	2.0%	2.5%	1.1%
Bones	0.1%	0.1%	0.1%	0.1%	0.1%
Other waste (earth, dust, sand, undefined)	2.8%	3.6%	3.6%	3.6%	6.2%
Hazardous fraction of municipal waste	1.0%	0.8%	1.2%	1.0%	1.2%
Diapers	4.0%	3.2%	4.8%	4.0%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%





Tekst iz tablice: Srednja vrijednost, Organski otpad (kuhinjski otpad), Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Opasne frakcije komunalnog otpada, Pelene, Ukupno

Napomena: crveno označeni postoci izračunani su uzimajući u obzir analizu razdoblja 17. – 22. 11. 2014.

2.6. KONAČNI REZULTATI ANALIZE SASTAVA OTPADA

Kako bi se procijenila analiza prosječnog sastava otpada koja će se upotrijebiti u daljnjim izračunima projekta, u obzir su uzete sljedeće pretpostavke u pogledu udjela svakog razdoblja uzorkovanja u ukupnoj godini:

- Analiza sastava otpada u razdoblju 4. – 9. 8. 2014.: udio 25 %
- Analiza sastava otpada u razdoblju 25. – 9. 8. 2014 i 13. – 18. 10. 2014.: udio 50 %
- Analiza sastava otpada u razdoblju 17. – 22. 11. 2014.: udio 25 %

U skladu s navedenim pretpostavkama dobiveni su sljedeći rezultati:

Tablica 22: Analiza prosječnog sastava otpada za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja

	Average waste composition
Kitchen waste	23.5%
Garden waste	4.5%
Paper and Cardboard	23.0%
Plastics	22.3%
Metals	4.1%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber	2.3%
Skin and bones	0.2%
Other waste (earth, dust, sand, undefined)	1.7%
Problematic substances (diapers, batteries, etc)	5.2%
Total	100.0%

Tekst iz tablice: Prosječni sadržaj otpada

Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Koža i kosti, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene, baterije itd.), Ukupno





Tablica 23: Analiza prosječnog sastava otpada s detaljima za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja

	Average waste composition
Organic waste (kitchen waste)	23.5%
Garden waste	4.5%
Paper	11.5%
Cardboard	5.4%
Tetrapak	6.2%
Plastics (PVC, PP, HDPE, PET, PS)	9.5%
LDPE bags	6.2%
Other plastics	6.6%
Metals Fe	2.9%
Metals Al	1.2%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber-Leather	2.3%
Bones	0.2%
Other waste (earth, dust, sand, undefined)	1.7%
Hazardous fraction of municipal waste	1.0%
Diapers	4.2%
Total	100.0%

Tekst iz tablice: Prosječni sastav otpada





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Organski otpad (kuhinjski otpad), Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Opasne frakcije komunalnog otpada, Pelene, Ukupno

Napomena: crveno označeni postoci izračunani su uzimajući u obzir analizu razdoblja 17. – 22. 11. 2014.



Tablica 24: Analiza prosječnog sastava otpada za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Šibensko-kninsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja

	Average waste composition
Kitchen waste	19.3%
Garden waste	5.7%
Paper and Cardboard	22.7%
Plastics	21.6%
Metals	3.7%
Glass	5.5%
Wood	1.6%
Textile	6.0%
Rubber	2.3%
Skin and bones	0.0%
Other waste (earth, dust, sand, undefined)	6.4%
Problematic substances (diapers, batteries, etc)	5.2%
Total	100.0%

Tekst iz tablice: Prosječni sadržaj otpada

Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Koža i kosti, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene, baterije itd.), Ukupno

Tablica 25: Analiza prosječnog sastava otpada s detaljima za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz Izvješća o analizi za Šibensko-kninsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

	Average waste composition
Organic waste (kitchen waste)	19.3%
Garden waste	5.7%
Paper	11.1%
Cardboard	5.4%
Tetrapak	6.2%
Plastics (PVC, PP, HDPE, PET, PS)	9.6%
LDPE bags	6.2%
Other plastics	5.7%
Metals Fe	2.6%
Metals Al	1.1%
Glass	5.5%
Wood	1.6%
Textile	6.0%
Rubber-Leather	2.3%
Bones	0.0%
Other waste (earth, dust, sand, undefined)	6.4%
Hazardous fraction of municipal waste	1.0%
Diapers	4.2%
Total	100.0%

Tekst iz tablice: Prosječni sastav otpada

Organski otpad (kuhinjski otpad), Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Opasne frakcije komunalnog otpada, Pelene, Ukupno

Napomena: crveno označeni postoci izračunani su uzimajući u obzir analizu razdoblja 17. – 22. 11. 2014.

Tablica 26: Analiza prosječnog sastava otpada za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz srednje vrijednosti iz Izvješća o analizi za Šibensko-kninsku i Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

	Average waste composition
Kitchen waste	21.4%
Garden waste	5.1%
Paper and Cardboard	22.9%
Plastics	21.9%
Metals	3.9%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber	2.3%
Skin and bones	0.1%
Other waste (earth, dust, sand, undefined)	4.0%
Problematic substances (diapers, batteries, etc)	5.2%
Total	100.0%

Tekst iz tablice: Prosječni sadržaj otpada

Kuhinjski otpad, Vrtni otpad, Papir i karton, Plastika, Metali, Staklo, Drvo, Tekstil, Guma, Koža i kosti, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Problematične tvari (pelene, baterije itd.), Ukupno

Tablica 27: Analiza prosječnog sastava otpada s detaljima za Splitsko-dalmatinsku županiju uzimajući u obzir pretpostavke iz srednje vrijednosti iz Izvješća o analizi za Šibensko-kninsku i Zadarsku županiju te pretpostavke u pogledu dijeljenja svakog razdoblja uzorkovanja

	Average waste composition
Organic waste (kitchen waste)	21.4%
Garden waste	5.1%
Paper	11.3%
Cardboard	5.4%
Tetrapak	6.2%
Plastics (PVC, PP, HDPE, PET, PS)	9.6%
LDPE bags	6.2%
Other plastics	6.1%
Metals Fe	2.7%
Metals Al	1.1%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber-Leather	2.3%
Bones	0.1%
Other waste (earth, dust, sand, undefined)	4.0%
Hazardous fraction of municipal waste	1.0%
Diapers	4.2%
Total	100.0%

Tekst iz tablice: Prosječni sastav otpada



Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Organski otpad (kuhinjski otpad), Vrtni otpad, Papir, Karton, Tetrapak, Plastika (PVC, PP, HDPE, PET, PS), LDPE vrećice, Ostala plastika, Metali Fe, Metali Al, Staklo, Drvo, Tekstil, Guma – Koža, Kost, Ostali otpad (zemlja, prašina, pijesak, nedefinirano), Opasne frakcije komunalnog otpada, Pelene, Ukupno

Napomena: crveno označeni postoci izračunani su uzimajući u obzir analizu razdoblja 17. – 22. 11. 2014.

Analiza sastava otpada koja je predstavljena u tablicama 27. i 28. predstavlja analizu sastava otpada za Splitsko-dalmatinsku županiju koja će se upotrijebiti u daljnjim izračunima.



3. IZRAČUNI UKUPNE PROIZVODNJE KOMUNALNOG OTPADA U SPLITSKO-DALMATINSKOJ ŽUPANIJU PO PRETOVARNOJ STANICI

Uzimajući u obzir činjenicu da će prijevoz otpada do Centra za gospodarenje otpadom biti proveden putem pretovarnih stanica koje će služiti za potrebe određenih gradova, odnosno općina, za precizniji izračun prognoze do 2047. provedeno je dijeljenje svakog grada/općine u 6 pretovarnih stanica. U sljedećoj tablici prikazano je dijeljenje svakog grada/općine u Splitsko-dalmatinskoj županiji u 6 pretovarnih stanica.

Tablica 28: Pregled pretovarnih stanica

Pretovarne stanice	Gradovi/općine kojima će pretovarne stanice služiti	Procjena stanovništva za 2015. (stalno)	Turistička noćenja (prema Državnom zavodu za statistiku za godinu 2015.)	Turistička noćenja (prema Državnom zavodu za statistiku za godinu 2016.)	
Izravno u CGO	Trogir	13.223	391.071	440.886	
	Seget	4741	600.006	694.526	
	Okrug	3600	641.927	557.687	
	Marina	4673	264.598	293.680	
	Ukupno	26.237	1.897.602	1.986.779	
Split	Split	173.109	1.339.598	1.717.396	
	Kaštela	40.586	277.370	356.895	
	Solin	25.564	32.079	46.129	
	Dugopolje	3.782	29.399	34.272	
	Podstrana	10.862	483.055	497.943	
	Omiš	14.798	759.457	829.440	
	Dugi Rat	7060	243.977	300.006	
	Zadvarje	301	1000	1485	
	Šestanovac	1769	1137	5087	
	Klis	5020	0	5747	
	Šolta	2050	109.159	128.344	
	Ukupno	284.901	3.276.231	3.922.744	
	Sinj	Sinj	24.617	15.764	14.803
		Hrvace	3150	915	2124
Dicmo		2867	3085	4686	
Trilj		8621	11.812	13.128	
Otok		5253	0	1664	
Vrlika		1930	0	0	
Ukupno		46.438	31.576	36.405	
Zagvozd	Grad Imotski	10587	8769	13.382	
	Vrgorac	5911	6192	5623	
	Baška Voda	2883	982.762	1.050.319	
	Brela	1714	568.889	583.081	
	Makarska	14.217	1.115.435	1.346.104	
	Tučepi	1991	664.133	677.623	
	Podgora	2508	892.369	919.825	
	Cista Provo	1992	1500	2966	





Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Pretovarne stanice	Gradovi/optine kojima će pretovarne stanice služiti	Procjena stanovništva za 2015. (stalno)	Turistička noćenja (prema Državnom zavodu za statistiku za godinu 2015.)	Turistička noćenja (prema Državnom zavodu za statistiku za godinu 2016.)
	Lovreč	1442	0	457
	Lokvičići	665	0	0
	Proložac	3464	0	4003
	Podbablje	4428	0	7840
	Zmijavci	1957	0	5024
	Runovići	2243	0	711
	Zagvozd	1006	0	3241
	Gradac	3077	899.090	870.751
	Ukupno	60.085	5.149.139	5.490.949
Brač	Pučišća	2153	23.444	25.579
	Nerežišća	890	0	9157
	Selca	1802	73.342	86.774
	Bol	1751	562.052	655.864
	Sutivan	907	91.554	101.343
	Postira	1582	86.643	121.925
	Milna	1161	61.910	74.725
	Supetar	4362	498.962	633.256
	Ukupno	14.608	1.397.907	1.708.623
Vis	Vis	2035	139.030	161.978
	Komiža	1524	74.864	102.767
	Ukupno	3559	213.894	264.745
Hvar	Stari Grad	2867	196.508	210.189
	Hvar	4440	586.538	655.868
	Jelsa	3691	472.582	546.286
	Sućuraj	500	66.590	56.759
	Ukupno	11.498	1.322.218	1.469.102
Izravno u CGO	Muč	3738	0	480
	Lečevica	471	238	651
	Prgomet	579	0	182
	Primorski Dolac	727	0	230
	Ukupno	5515	238	1543
UKUPNO		452.841	13.288.805	14.880.891

Na temelju podataka koji su predstavljeni u prethodnoj tablici, pretpostavki koje su uzete u obzir za predviđanja u pogledu stanovništva (stalno i sezonsko) te predviđanja u pogledu proizvodnje otpada (izračunana na temelju najgoreg scenarija) dobiveni su sljedeći rezultati:





Studija izvedivosti za razvoj integriranog i održivog sustava za gospodarenje otpadom u Špiškom-dalmatinskoj županiji

Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

Kod otpada	Godine proizvodnje otpada (t)												Ukupno																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Proizvodnja i pakiranje	15.412	14.232	14.508	14.843	15.187	15.536	15.891	16.252	16.619	16.992	17.371	17.755	18.144	18.538	18.937	19.340	19.747	20.158	20.573	20.992	21.415	21.842	22.272	22.705	23.142	23.582	24.025	24.472	24.922	25.375	25.831	26.290	26.752	27.217	27.685	28.156	28.630	29.107	29.587	30.070	30.556	31.045	31.537	32.032	32.530	33.031	33.535	34.042	34.552	35.064	35.579	36.097	36.618	37.142	37.669	38.199	38.732	39.268	39.807	40.349	40.894	41.442	41.993	42.547	43.104	43.664	44.227	44.793	45.362	45.934	46.509	47.087	47.668	48.252	48.839	49.429	50.022	50.618	51.217	51.819	52.424	53.032	53.643	54.257	54.874	55.494	56.117	56.743	57.372	57.993	58.617	59.244	59.873	60.505	61.140	61.777	62.417	63.060	63.706	64.355	65.007	65.662	66.320	66.981	67.645	68.312	68.982	69.655	70.331	71.010	71.692	72.377	73.065	73.756	74.450	75.147	75.847	76.550	77.256	77.965	78.677	79.392	80.110	80.831	81.555	82.282	83.012	83.745	84.481	85.220	85.962	86.707	87.455	88.206	88.960	89.717	90.477	91.240	92.006	92.775	93.547	94.322	95.099	95.879	96.662	97.448	98.237	99.029	99.824	100.622	101.423	102.227	103.034	103.844	104.657	105.473	106.292	107.114	107.939	108.767	109.598	110.432	111.269	112.109	112.952	113.798	114.647	115.499	116.354	117.212	118.073	118.937	119.804	120.674	121.547	122.423	123.302	124.184	125.069	125.957	126.848	127.742	128.639	129.539	130.442	131.348	132.257	133.169	134.084	135.002	135.923	136.847	137.774	138.704	139.637	140.573	141.512	142.454	143.400	144.349	145.301	146.257	147.216	148.179	149.145	150.115	151.088	152.064	153.043	154.025	155.010	156.000	157.000	158.000	159.000	160.000	161.000	162.000	163.000	164.000	165.000	166.000	167.000	168.000	169.000	170.000	171.000	172.000	173.000	174.000	175.000	176.000	177.000	178.000	179.000	180.000	181.000	182.000	183.000	184.000	185.000	186.000	187.000	188.000	189.000	190.000	191.000	192.000	193.000	194.000	195.000	196.000	197.000	198.000	199.000	200.000	201.000	202.000	203.000	204.000	205.000	206.000	207.000	208.000	209.000	210.000	211.000	212.000	213.000	214.000	215.000	216.000	217.000	218.000	219.000	220.000	221.000	222.000	223.000	224.000	225.000	226.000	227.000	228.000	229.000	230.000	231.000	232.000	233.000	234.000	235.000	236.000	237.000	238.000	239.000	240.000	241.000	242.000	243.000	244.000	245.000	246.000	247.000	248.000	249.000	250.000	251.000	252.000	253.000	254.000	255.000	256.000	257.000	258.000	259.000	260.000	261.000	262.000	263.000	264.000	265.000	266.000	267.000	268.000	269.000	270.000	271.000	272.000	273.000	274.000	275.000	276.000	277.000	278.000	279.000	280.000	281.000	282.000	283.000	284.000	285.000	286.000	287.000	288.000	289.000	290.000	291.000	292.000	293.000	294.000	295.000	296.000	297.000	298.000	299.000	300.000	301.000	302.000	303.000	304.000	305.000	306.000	307.000	308.000	309.000	310.000	311.000	312.000	313.000	314.000	315.000	316.000	317.000	318.000	319.000	320.000	321.000	322.000	323.000	324.000	325.000	326.000	327.000	328.000	329.000	330.000	331.000	332.000	333.000	334.000	335.000	336.000	337.000	338.000	339.000	340.000	341.000	342.000	343.000	344.000	345.000	346.000	347.000	348.000	349.000	350.000	351.000	352.000	353.000	354.000	355.000	356.000	357.000	358.000	359.000	360.000	361.000	362.000	363.000	364.000	365.000	366.000	367.000	368.000	369.000	370.000	371.000	372.000	373.000	374.000	375.000	376.000	377.000	378.000	379.000	380.000	381.000	382.000	383.000	384.000	385.000	386.000	387.000	388.000	389.000	390.000	391.000	392.000	393.000	394.000	395.000	396.000	397.000	398.000	399.000	400.000	401.000	402.000	403.000	404.000	405.000	406.000	407.000	408.000	409.000	410.000	411.000	412.000	413.000	414.000	415.000	416.000	417.000	418.000	419.000	420.000	421.000	422.000	423.000	424.000	425.000	426.000	427.000	428.000	429.000	430.000	431.000	432.000	433.000	434.000	435.000	436.000	437.000	438.000	439.000	440.000	441.000	442.000	443.000	444.000	445.000	446.000	447.000	448.000	449.000	450.000	451.000	452.000	453.000	454.000	455.000	456.000	457.000	458.000	459.000	460.000	461.000	462.000	463.000	464.000	465.000	466.000	467.000	468.000	469.000	470.000	471.000	472.000	473.000	474.000	475.000	476.000	477.000	478.000	479.000	480.000	481.000	482.000	483.000	484.000	485.000	486.000	487.000	488.000	489.000	490.000	491.000	492.000	493.000	494.000	495.000	496.000	497.000	498.000	499.000	500.000	501.000	502.000	503.000	504.000	505.000	506.000	507.000	508.000	509.000	510.000	511.000	512.000	513.000	514.000	515.000	516.000	517.000	518.000	519.000	520.000	521.000	522.000	523.000	524.000	525.000	526.000	527.000	528.000	529.000	530.000	531.000	532.000	533.000	534.000	535.000	536.000	537.000	538.000	539.000	540.000	541.000	542.000	543.000	544.000	545.000	546.000	547.000	548.000	549.000	550.000	551.000	552.000	553.000	554.000	555.000	556.000	557.000	558.000	559.000	560.000	561.000	562.000	563.000	564.000	565.000	566.000	567.000	568.000	569.000	570.000	571.000	572.000	573.000	574.000	575.000	576.000	577.000	578.000	579.000	580.000	581.000	582.000	583.000	584.000	585.000	586.000	587.000	588.000	589.000	590.000	591.000	592.000	593.000	594.000	595.000	596.000	597.000	598.000	599.000	600.000	601.000	602.000	603.000	604.000	605.000	606.000	607.000	608.000	609.000	610.000	611.000	612.000	613.000	614.000	615.000	616.000	617.000	618.000	619.000	620.000	621.000	622.000	623.000	624.000	625.000	626.000	627.000	628.000	629.000	630.000	631.000	632.000	633.000	634.000	635.000	636.000	637.000	638.000	639.000	640.000	641.000	642.000	643.000	644.000	645.000	646.000	647.000	648.000	649.000	650.000	651.000	652.000	653.000	654.000	655.000	656.000	657.000	658.000	659.000	660.000	661.000	662.000	663.000	664.000	665.000	666.000	667.000	668.000	669.000	670.000	671.000	672.000	673.000	674.000	675.000	676.000	677.000	678.000	679.000	680.000	681.000	682.000	683.000	684.000	685.000	686.000	687.000	688.000	689.000	690.000	691.000	692.000	693.000	694.000	695.000	696.000	697.000	698.000	699.000	700.000	701.000	702.000	703.000	704.000	705.000	706.000	707.000	708.000	709.000	710.000	711.000	712.000	713.000	714.000	715.000	716.000	717.000	718.000	719.000	720.000	721.000	722.000	723.000	724.000	725.000	726.000	727.000	728.000	729.000	730.000	731.000	732.000	733.000	734.000	735.000	736.000	737.000	738.000	739.000	740.000	741.000	742.000	743.000	744.000	745.000	746.000	747.000	748.000	749.000	750.000	751.000	752.000	753.000	754.000	755.000	756.000	757.000	758.000	759.000	760.000	761.000	762.000	763.000	764.000	765.000	766.000	767.000	768.000	769.000	770.000	771.000	772.000	773.000	774.000	775.000	776.000	777.000	778.000	779.000	780.000	781.000	782.000	783.000	784.000	785.000	786.000	787.000	788.000	789.000	790.000	791.000	792.000	793.000	794.000	795.000	796.000	797.000	798.000	799.000	800.000	801.000	802.000	803.000	804.000	805.000	806.000	807.000	808.000	809.000	810.000	811.000	812.000	813.000	814.000	815.000	816.000	817.000	818.000	819.000	820.000	821.000	822.000	823.000	824.000	825.000	826.000	827.000	828.000	829.000	830.000	831.000	832.000	833.000	834.000	835.000	836.000	837.000	838.000	839.000	840.000	841.000	842.000	843.000	844.000	845.000	846.000	847.000	848.000	849.000	850.000	851.000	852.000	853.000	854.000	855.000	856.000	857.000	858.000	859.000	860.000	861.000	862.000	863.000	864.000	865.000	866.000	867.000	868.000	869.000	870.000	871.000	872.000	873.000	874.000	875.000	876.000	877.000	878.000	879.000	880.000	881.000	882.000	883.000	884.000	885.000	886.000	887.000	888.000	889.000	890.000	891.000	892.000	893.000	894.000	895.000	896.000	897.000	898.000	899.000	900.000	901.000	902.000	903.000	904.000	905.000	906.000	907.000	908.000	909.000	910.000	911.000	912.000	913.000	914.000	915.000	916.000	917.000	918.000	919.000	920.000	921.000	922.000	923.000	924.000	925.000	926.000	927.000	928.000	929.000	930.000	931.000	932.000	933.000	934.000	935.000	936.000	937.000	938.000	939.000	940.000	941.000	942.000	943.000	944.000	



Studija izvedivosti za razvoj integriranog i održivog sustava za gospodarenje otpadom u Splitsko-dalmatinskoj županiji

Prilog 4.1. Sadržaj otpada i predviđanja za buduću proizvodnju otpada

MIRF Facility assumptions	Recovery %
Paper	80%
Paper Packaging	80%
Paper non packaging	80%
Plastic	80%
Plastic packaging	80%
Plastic non packaging	80%
Glass	80%
Glass packaging	80%
Glass non packaging	80%
Metal	80%
Metal packaging	80%
Metal non packaging	80%

Tekst u tablici: Predviđena MIRF pretpostavke, Oponaor %

Papir, Papirnatu ambalaža, papirnata neambalaža, Plastična ambalaža, Staklena neambalaža, Staklo, Staklena ambalaža, Plastična ambalaža, Metal, Metalna ambalaža, Metalna neambalaža

MIRF categories (RECYCLABLES)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050		
Paper	40,048	39,008	38,708	38,529	38,351	38,173	38,097	38,021	38,000	38,914	38,990	38,985	39,021	39,056	39,092	39,129	39,165	39,202	39,239	39,276	39,312	39,348	39,384	39,420	39,456	39,492	39,528	39,564	39,600	
Paper Packaging	20,268	20,194	20,103	20,013	19,922	19,831	19,741	19,654	19,644	19,702	19,719	19,737	19,755	19,773	19,792	19,810	19,829	19,847	19,866	19,871	19,877	19,883	19,889	19,895	19,901	19,907	19,913	19,919	19,925	
Paper non packaging	19,782	18,814	18,605	18,516	18,429	18,344	18,259	18,175	18,186	19,212	19,200	19,248	19,265	19,283	19,301	19,319	19,337	19,355	19,373	19,378	19,384	19,390	19,396	19,401	19,406	19,411	19,416	19,421	19,426	
Plastic	80,325	80,189	80,052	79,915	79,778	79,641	79,504	79,367	79,436	79,452	79,470	79,505	79,532	79,560	79,587	79,614	79,642	79,670	79,698	79,726	79,754	79,782	79,810	79,838	79,866	79,894	79,922	79,950	79,978	
Plastic packaging	20,671	20,520	20,436	20,344	20,252	20,161	20,070	19,979	20,030	20,028	20,046	20,064	20,082	20,100	20,119	20,138	20,157	20,176	20,194	20,206	20,212	20,218	20,224	20,230	20,236	20,242	20,248	20,254	20,260	
Plastic non packaging	59,654	59,669	59,616	59,572	59,526	59,480	59,434	59,388	59,406	59,424	59,424	59,442	59,450	59,458	59,466	59,474	59,482	59,490	59,498	59,506	59,514	59,522	59,530	59,538	59,546	59,554	59,562	59,570	59,578	
Glass	9,481	9,438	9,395	9,353	9,311	9,269	9,227	9,186	9,199	9,208	9,216	9,224	9,233	9,241	9,250	9,258	9,267	9,276	9,284	9,287	9,290	9,292	9,295	9,298	9,301	9,304	9,307	9,310	9,313	9,316
Glass packaging	6,536	6,508	6,477	6,447	6,418	6,388	6,359	6,330	6,400	6,445	6,453	6,457	6,461	6,465	6,469	6,473	6,477	6,481	6,485	6,489	6,501	6,503	6,505	6,507	6,509	6,511	6,513	6,515	6,517	
Glass non packaging	2,944	2,930	2,918	2,906	2,894	2,882	2,870	2,858	2,799	2,763	2,763	2,767	2,770	2,773	2,775	2,778	2,781	2,784	2,787	2,790	2,792	2,794	2,796	2,798	2,799	2,801	2,802	2,804	2,806	
Metal	5,239	5,215	5,192	5,168	5,145	5,122	5,099	5,076	5,064	5,068	5,073	5,077	5,082	5,087	5,091	5,096	5,101	5,106	5,111	5,116	5,121	5,126	5,131	5,136	5,141	5,146	5,151	5,156	5,161	
Metal packaging	4,131	4,112	4,094	4,075	4,057	4,039	4,021	4,003	4,008	4,012	4,016	4,019	4,023	4,027	4,030	4,034	4,038	4,042	4,045	4,047	4,048	4,049	4,050	4,051	4,052	4,053	4,054	4,055	4,056	
Metal non packaging	1,108	1,103	1,098	1,093	1,088	1,083	1,078	1,074	1,075	1,076	1,077	1,078	1,079	1,080	1,081	1,082	1,083	1,084	1,085	1,085	1,085	1,085	1,086	1,086	1,087	1,087	1,087	1,087	1,087	
Total Recyclables	85,113	84,720	84,347	83,967	83,589	83,212	82,837	82,464	82,508	82,642	82,747	82,812	82,888	82,964	83,040	83,117	83,195	83,273	83,351	83,374	83,399	83,423	83,448	83,473	83,498	83,523	83,548	83,573	83,598	
Total Packaging	51,074	51,641	51,209	50,979	50,749	50,520	50,293	50,066	50,141	50,186	50,232	50,277	50,323	50,369	50,416	50,463	50,510	50,557	50,605	50,618	50,633	50,648	50,663	50,678	50,693	50,708	50,723	50,738	50,753	

Tekst u tablici: Učinki MIRF-a (Oponaor) (MATERIALI KOJE JE MOGUĆE RECYCLIRATI)

Papir, Papirnatu ambalaža, Papirnatu neambalaža, Plastična ambalaža, Staklo, Staklena ambalaža, Plastična ambalaža, Metal, Metalna ambalaža, Metalna neambalaža, Ukupna količina materijala koje je moguće reciklirati, Ukupna količina ambalaža



Studija izvedivosti za razvoj integriranog i održivog sustava za gospodarenje
 otpadom u Splitsko-dalmatinskoj županiji

Prilog 4.1. Sadržaj otpada i predviđanja za budući proizvodnju otpada

	2017	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	
MRF output (Residues)																										
Paper	5,009	4,966	4,953	4,941	4,919	4,897	4,875	4,853	4,862	4,864	4,869	4,873	4,878	4,881	4,887	4,891	4,900	4,900	4,902	4,904	4,904	4,904	4,904	4,911	4,912	4,914
Paper non packaging	2,536	2,524	2,513	2,502	2,479	2,458	2,437	2,416	2,461	2,463	2,467	2,470	2,472	2,476	2,479	2,481	2,483	2,484	2,484	2,485	2,485	2,485	2,486	2,487	2,489	2,490
Plastic	2,477	2,462	2,450	2,439	2,428	2,417	2,407	2,396	2,402	2,404	2,406	2,408	2,409	2,410	2,412	2,415	2,417	2,419	2,422	2,422	2,423	2,424	2,424	2,424	2,425	2,426
Plastic packaging	3,791	3,773	3,756	3,740	3,723	3,706	3,689	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673	3,673
Plastic non packaging	2,578	2,566	2,554	2,543	2,531	2,520	2,509	2,497	2,501	2,501	2,506	2,508	2,510	2,512	2,515	2,517	2,519	2,522	2,524	2,525	2,526	2,526	2,527	2,528	2,529	
Glass	1,211	1,208	1,202	1,197	1,191	1,186	1,181	1,175	1,177	1,178	1,179	1,180	1,181	1,182	1,183	1,185	1,186	1,187	1,188	1,189	1,189	1,189	1,189	1,190	1,190	
Glass packaging	1,185	1,180	1,174	1,169	1,164	1,159	1,153	1,148	1,153	1,153	1,153	1,153	1,154	1,155	1,156	1,157	1,158	1,159	1,160	1,161	1,161	1,162	1,162	1,162	1,163	
Glass non packaging	400	426	428	418	415	411	407	404	403	406	406	407	408	409	409	410	411	412	412	412	413	413	413	413	414	
Metal	356	354	352	351	349	348	346	344	345	345	346	346	346	347	347	347	348	348	348	348	348	348	348	348	349	
Metal packaging	635	652	649	646	643	640	637	635	635	636	637	637	638	638	639	640	640	640	641	641	642	642	642	642	643	
Metal non packaging	516	514	512	509	507	505	503	502	502	502	502	502	502	503	504	504	505	505	506	506	506	506	506	506	507	
Total Recyclables rejected	139	138	137	137	136	135	135	134	134	135	135	135	135	135	135	135	135	135	136	136	136	136	136	136	136	
Total MRF Input	10,634	10,591	10,543	10,496	10,449	10,402	10,355	10,308	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	
Other fractions rejected	10,639	10,594	10,543	10,496	10,449	10,402	10,355	10,308	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	10,324	
Total Residues	21,278	21,187	20,987	20,897	20,807	20,717	20,627	20,537	20,647	20,646	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	20,644	
MRF Input																										
Paper	50,085	49,859	49,639	49,411	49,183	48,956	48,728	48,500	48,599	48,643	48,687	48,731	48,776	48,820	48,865	48,911	48,956	49,002	49,048	49,094	49,140	49,186	49,232	49,278	49,324	
Paper non packaging	25,357	25,243	25,129	25,016	24,903	24,791	24,679	24,567	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	24,679	
Plastic	24,728	24,617	24,506	24,395	24,285	24,176	24,067	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	23,958	
Plastic packaging	37,807	37,736	37,666	37,596	37,526	37,456	37,386	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	37,316	
Plastic non packaging	25,777	25,600	25,423	25,246	25,069	24,892	24,715	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	24,538	
Glass	12,180	12,075	11,970	11,865	11,760	11,655	11,550	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	11,445	
Glass packaging	8,298	8,221	8,144	8,067	7,990	7,913	7,836	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	7,759	
Glass non packaging	4,285	4,139	4,023	3,907	3,791	3,675	3,559	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	3,443	
Metal	6,549	6,510	6,471	6,432	6,393	6,354	6,315	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	
Metal packaging	5,164	5,140	5,117	5,094	5,071	5,048	5,025	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	5,002	
Metal non packaging	1,385	1,370	1,354	1,338	1,322	1,306	1,290	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	
Total Recyclables	106,362	105,812	105,262	104,712	104,162	103,612	103,062	102,512	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	102,962	
Other fractions rejected																										
Total MRF Input																										
106,362	105,912	105,462	104,912	104,362	103,812	103,262	102,712	102,162	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	102,612	

Tekst iz prve tablice: Učinak MRF-a (rezidual)

Papir, Papirna ambalaza, Papirna neambalaza, Staklo, Staklena ambalaza, Staklena neambalaza, Metal, Metalna ambalaza, Metalna neambalaza, Ukupno količino odobrenih materijala koje je moguće reciklirati (loša kvaliteta), Ostale odobrene frakcije, Ukupni količino rezidua.

Tekst iz druge tablice: Otpad dovezen u MRF
 Papir, Papirna ambalaza, Papirna neambalaza, Staklo, Staklena ambalaza, Staklena neambalaza, Metal, Metalna ambalaza, Metalna neambalaza, Ukupno količino materijala koje je moguće reciklirati, Ostale odobrene frakcije, Ukupno otpad dovezen u MRF



Ja, Paula Jakus, stalni sudski tumač za engleski i talijanski jezik, imenovana rješenjem predsjednika Županijskog suda u Splitu broj 4 Su-686/2017 od 8. ožujka 2018. potvrđujem da gornji prijevod potpuno odgovara izvorniku sastavljenom na engleskom jeziku.
U Splitu, 16. 12. 2019., br. 463-2019.



Paula Jakus



Annex 4

Waste content and future generation forecast





TABLE OF CONTENTS

1. Introduction.....	1
2. Morphological composition of the mixed municipal waste	1
2.1. Results for waste composition analysis derived from Sampling Period 17-22/11/2014	3
2.2. Results for waste composition analysis derived from Sampling Period 13-18/10/2014	6
2.3. Results for waste composition analysis derived from Sampling Period 25-29/08/2014	10
2.4. Results for waste composition analysis derived from Sampling Period 04-09/08/2014	13
2.5. Summary of waste composition analysis derived from the four sampling periods.....	17
2.6. Final results for waste composition analysis.....	21
3. Calculation for the total production of municipal waste in Split-Dalmatia County per TS.....	26
4. ANALYTICAL CalculationS OF GOALS ACCORDING NWMP OF RC 2017-2022 AND OF WASTE THAT WILL BE TREATED IN LECEVICA WMC.....	30

LIST OF TABLES

Table 1: Waste composition analysis (17-22/11/2014).....	3
Table 2: Re-estimation of waste composition analysis (17-22/11/2014) taking into consideration assumptions for the fraction<20 mm from Zadar County waste composition analysis.....	4
Table 3: Re-estimation of waste composition analysis (17-22/11/2014) taking into consideration assumptions for the fraction<20 mm from Sibenik County waste composition analysis	5
Table 4: Re-estimation of waste composition analysis (17-22/11/2014) taking into consideration assumptions for the fraction<20 mm the mean value from Zadar and Sibenik Counties.....	6
Table 5: Waste composition analysis (13-18/10/2014).....	6
Table 6: Re-estimation of waste composition analysis (13-18/10/2014) taking into consideration assumptions for the fraction<40 mm from Zadar County waste composition analysis.....	7
Table 7: Re-estimation of waste composition analysis (13-18/10/2014) taking into consideration assumptions for the fraction<40 mm from Sibenik County waste composition analysis	8
Table 8: Re-estimation of waste composition analysis (13-18/10/2014) taking into consideration assumptions for the fraction<40 mm the mean value from Zadar and Sibenik Counties.....	9
Table 9: Waste composition analysis (25-29/08/2014).....	10
Table 10: Re-estimation of waste composition analysis (25-29/08/2014) taking into consideration assumptions for the fraction<40 mm from Zadar County waste composition analysis.....	11
Table 11: Re-estimation of waste composition analysis (25-29/08/2014) taking into consideration assumptions for the fraction<40 mm from Sibenik County waste composition analysis	12
Table 12: Re-estimation of waste composition analysis (25-29/08/2014) taking into consideration assumptions for the fraction<40 mm the mean value from Zadar and Sibenik Counties.....	13
Table 13: Waste composition analysis (04-09/08/2014).....	13
Table 14: Re-estimation of waste composition analysis (04-09/08/2014) taking into consideration assumptions for the fraction<40 mm from Zadar County waste composition analysis.....	14
Table 15: Re-estimation of waste composition analysis (04-09/08/2014) taking into consideration assumptions for the fraction<40 mm the mean value from Zadar and Sibenik Counties.....	16
Table 16: Summary table taking into consideration assumptions for the fractions <20 mm and <40 mm from Zadar County waste composition analysis.....	17
Table 17: Summary table in detail format taking into consideration assumptions for the fractions <20 mm and <40 mm from Zadar County waste composition analysis.....	18
Table 18: Summary table taking into consideration assumptions for the fractions <20 mm and <40 mm from Sibenik County waste composition analysis	19
Table 19: Summary table in detail format taking into consideration assumptions for the fractions <20 mm and <40 mm from Sibenik County waste composition analysis	19
Table 20: Summary table taking into consideration assumptions for the fractions <20 mm and <40 mm from mean values of Sibenik County and Zadar County waste composition analysis	20





Table 21: Summary table in detail format taking into consideration assumptions for the fractions <20 mm and <40 mm from mean values of Sibenik County and Zadar County waste composition analysis	20
Table 22: Average waste composition analysis for Split-Dalmatia County taking into consideration assumptions from Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period	21
Table 23: Average waste composition analysis in detail format for Split-Dalmatia County taking into consideration assumptions from Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period	22
Table 24: Average waste composition analysis for Split-Dalmatia County taking into consideration assumptions from Sibenik Waste Composition analysis Report and assumptions regarding the sharing of each sampling period	23
Table 25: Average waste composition analysis in detail format for Split-Dalmatia County taking into consideration assumptions from Sibenik Waste Composition analysis Report and assumptions regarding the sharing of each sampling period	23
Table 26: Average waste composition analysis for Split-Dalmatia County taking into consideration assumptions from mean value of Sibenik and Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period.....	24
Table 27: Average waste composition analysis in detail format for Split-Dalmatia County taking into consideration assumptions from mean value of Sibenik and Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period.....	24
Table 28: Transfer Stations Overview.....	26
Table 29: Forecast of produced municipal waste for the towns/municipalities of Trogir, Seget, Okrug and Marina	28
Table 30: Forecast of produced municipal waste for the towns/municipalities that will be served from Split TS.....	28
Table 31: Forecast of produced municipal waste for the towns/municipalities that will be served from Sinj TS.....	28
Table 32: Forecast of produced municipal waste for the towns/municipalities that will be served from Zagvozd TS.....	28
Table 33: Forecast of produced municipal waste for the towns/municipalities that will be served from Brac TS.....	28
Table 34: Forecast of produced municipal waste for the towns/municipalities that will be served from Vis TS.....	28
Table 35: Forecast of produced municipal waste for the towns/municipalities that will be served from Hvar TS.....	29
Table 36: Forecast of produced municipal waste for the towns/municipalities that will be transferred directly to WMC without TS	29
Table 37: Forecast of produced municipal waste for the total Split-Dalmatia County	29





1. INTRODUCTION

This annex provides analytical calculations and assumptions that have been used in order to determine an average waste composition analysis. Also provides assumptions for the recalculation of bulky waste quantities as well as analytical calculations for the waste production in Split-Dalmatia County, taking into consideration the medium scenario for both the forecast of population and the forecast of waste production rate per Transfer Station that will be served specific Towns/Municipalities.

2. MORPHOLOGICAL COMPOSITION OF THE MIXED MUNICIPAL WASTE

As it is mentioned in the main text, during the implementation of the project have been taken place 4 samplings in the following periods:

- 17-22/11/2014
- 13-18/10/2014
- 25-29/8/2014
- 4-9/8/2014

Prior to the sampling, landfill sites were ranked according the following specifications:

1. Percentage coverage of urban and rural regions.
2. Total sample size >75% of total MSW production in the study area.
3. Sampling in regions where a great production of recycling materials is expected.
4. Availability of each landfill during the sampling period.

According to these requirements, the following sampling sites were selected:

„Karepovac“- Split, „Stanišće“- Hvar, „Košer-Brač“, „Kozjačić“- Imotski, „Mojanka“-Sinj, „Ajdanovac“- Vrgorac and „Poljanka“- Vrlika. Sampling was done in the times of 04 to 10 and 25 to 29 August, October 13 to 18 and 17 to 22 November.

Sampling was carried out on "Karepovac" during these seven days, on "Stanišće" during the four days, on "Košer" for 6 days, on "Mojanka" during the six days, on "Poljanka" one day, on "Kozjačić" during the four days, and on "Ajdanovac" for 4 days.

During preparation of the sampling plan, it was taken into consideration to include all urban areas i.e. bigger cities as well as smaller urban areas (as shown in an annex). Thus all singularities of the surveyed area were taken into account in order to obtain results as realistic as possible and samples as representative as possible.

Sampling of municipal waste on 7 landfills covers about 86 % of the population (391.268), or about 88 % of municipal waste in the county (161.130 t). The percentage of urban population covered is approximately 78 % and approximately 22 % rural. Based on these data is assigned a weighting factor to measured values of waste components in the samples in the calculation of the percentage of each component.

During unloading of vehicles and sampling it was taken into consideration that the sample should be as heterogeneous as possible in such a way that it was clutched vertically from top to bottom. The representative sample from the isolated quantity of waste is obtained by the "quartering" method. Upon mixing the sample is formed into a conical pile, which is then flattened and divided into even quarters, the two opposite quarters are removed and the two remaining quarters are mixed again. The procedure is repeated until a sample of required size is obtained. The methodology is adjusted with Addendum 5 of the Ordinance on methods and conditions for disposing of waste, categories and operational requirements for landfill sites (NN 117/07, NN 111/11).





The methodology is designed according to the existing methodology and experience in European Union and adapted to the present conditions in the County, social and economic structure of the County. Methodology for waste sorting requires determination of waste types, characteristics of different waste, amount of waste in the observed sample and the percentage share of different waste types in total waste quantity.

The method of analysis of waste can be described as follows:

- Waste sample is transferred on the grid where it is manually sorted and sieved through all three grids, greater than 100 mm, 40-100 mm and less than 40 mm.
- After sorting, each fraction is being scaled separately. The result of the analysis is amount of waste in every category,
- The results are registered in a special form that contains: date of sampling, origin of waste (municipality from which waste was admitted), the total amount of waste in the truck, information on the net weight of each fraction of waste.

The table shows the amount of total disposed dropping landfill, where sampling is done, in the county, and the amount of landfilled mixed municipal waste in 2012. The last column is the number of inhabitants covered by sampling.

Landfill	Total disposed (t)	Mixed municipal waste (t)	Number of inhabitants
Ajdanovac /Vrgorac/	2,968	2,968	6,501
Košer /Brač/	4,902	4,298	9,891
Karepovac /Split/	121,611	108,618	292,094
Kozjačić /Imotski/	10,350	10,300	26,272
Mojanka /Sinj/	30,724	30,242	48,349
Poljanak /Vrlika/	261	211	2,159
Stanišće /Hvar/	4,493	4,493	4,493





2.1. RESULTS FOR WASTE COMPOSITION ANALYSIS DERIVED FROM SAMPLING PERIOD 17-22/11/2014

Table 1: Waste composition analysis (17-22/11/2014)

In order to specify the fraction <20 mm that presented in the above table, the following assumptions have been taken into consideration:

- Assumptions for the fraction <20 mm, according the waste composition analysis in Zadar County (Spring 2014)

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:





Table 2: Re-estimation of waste composition analysis (17-22/11/2014) taking into consideration assumptions for the fraction <20 mm from Zadar County waste composition analysis

Organic waste	29.6%
Garden waste	3.8%
Paper	10.7%
Cardboard	5.1%
Tetrapak	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	6.1%
Metals Fe	2.6%
Metals Al	1.1%
Glass	5.0%
Wood	1.1%
Textile	4.1%
Rubber-Leather	1.1%
Bones	0.2%
Inert waste	3.4%
Hazardous fraction of municipal waste	1.2%
Diapers	4.7%
Total	100.0%

- Assumptions for the fraction <20 mm, according the waste composition analysis in Sibenik County (Spring 2014)

Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

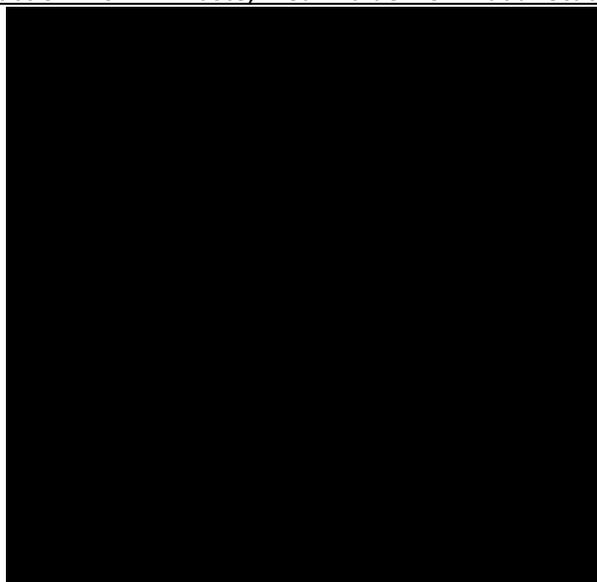




Table 3: Re-estimation of waste composition analysis (17-22/11/2014) taking into consideration assumptions for the fraction <20 mm from Sibenik County waste composition analysis

Organic waste	24.6%
Garden waste	5.2%
Paper	10.4%
Cardboard	5.1%
Tetrapak	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	5.2%
Metals Fe	2.3%
Metals Al	1.0%
Glass	4.8%
Wood	1.2%
Textile	4.1%
Rubber-Leather	1.1%
Bones	0.0%
Inert waste	8.9%
Hazardous fraction of municipal waste	1.2%
Diapers	4.7%
Total	100.0%

- Assumptions for the fraction <20 mm waste, mean value from Zadar Study and Sibenik study



Taking into consideration this assumption the waste composition analysis is estimated as follows:





Table 4: Re-estimation of waste composition analysis (17-22/11/2014) taking into consideration assumptions for the fraction <20 mm the mean value from Zadar and Sibenik Counties

Organic waste	27.1%
Garden waste	4.5%
Paper	10.6%
Cardboard	5.1%
Tetrapak	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	8.8%
LDPE bags	5.7%
Other plastics	5.6%
Metals Fe	2.5%
Metals Al	1.0%
Glass	4.9%
Wood	1.1%
Textile	4.1%
Rubber-Leather	1.1%
Bones	0.1%
Inert waste	6.2%
Hazardous fraction of municipal waste	1.2%
Diapers	4.7%
Total	100.0%

2.2. RESULTS FOR WASTE COMPOSITION ANALYSIS DERIVED FROM SAMPLING PERIOD 13-18/10/2014

Table 5: Waste composition analysis (13-18/10/2014)

Metal	3.0%
Wood	2.0%
Textile	7.0%
Paper and cardboard	22.0%
Glass	5.0%
Plastic	21.0%
Rubber	2.0%
Kitchen waste	15.0%
Garden waste	3.0%
Problematic substances (batteries, diapers etc.)	6.0%
fraction <40 mm	14.0%
Total	100.0%

In order to specify the fraction <40 mm that presented in the above table, the following assumptions have been taken into consideration:





- Assumptions for the fraction <40 mm, according the waste composition analysis in Zadar County (Spring 2014)

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

Table 6: Re-estimation of waste composition analysis (13-18/10/2014) taking into consideration assumptions for the fraction <40 mm from Zadar County waste composition analysis

Kitchen waste	23.8%
Garden waste	3.8%
Paper and Cardboard	22.9%
Plastics	22.0%
Metals	3.6%
Glass	5.5%
Wood	2.0%
Textile	7.0%
Rubber	2.0%
Skin and Bones	0.2%
Other waste (earth, dust, sand, undefined)	1.2%
Problematic substances (diapers etc.)	6.0%
Total	100.00%

- Assumptions for the fraction <40 mm, according the waste composition analysis in Sibenik County (Spring 2014)





Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste- Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

Table 7: Re-estimation of waste composition analysis (13-18/10/2014) taking into consideration assumptions for the fraction<40 mm from Sibenik County waste composition analysis

Kitchen waste	19.5%
Garden waste	5.1%
Paper and Cardboard	22.6%
Plastics	21.2%
Metals	3.1%
Glass	5.4%
Wood	2.0%
Textile	7.0%
Rubber	2.0%
Skin and Bones	0.0%
Other waste (earth, dust, sand, undefined)	6.0%
Problematic substances (diapers etc.)	6.0%
Total	100.00%

- Assumptions for the fraction<40 mm waste, mean value from Zadar Study and Sibenik study





Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

Table 8: Re-estimation of waste composition analysis (13-18/10/2014) taking into consideration assumptions for the fraction <40 mm the mean value from Zadar and Sibenik Counties

Kitchen waste	21.6%
Garden waste	4.5%
Paper and Cardboard	22.8%
Plastics	21.6%
Metals	3.4%
Glass	5.5%
Wood	2.0%
Textile	7.0%
Rubber	2.0%
Skin and Bones	0.1%
Other waste (earth, dust, sand, undefined)	3.6%
Problematic substances (diapers etc.)	6.0%
Total	100.00%





2.3. RESULTS FOR WASTE COMPOSITION ANALYSIS DERIVED FROM SAMPLING PERIOD 25-29/08/2014

Table 9: Waste composition analysis (25-29/08/2014)

Metal	3.0%
Wood	1.0%
Textile	6.0%
Paper and cardboard	21.0%
Glass	5.0%
Plastic	23.0%
Rubber	3.0%
Kitchen waste	15.0%
Garden waste	5.0%
Problematic substances (batteries, diapers etc.)	4.0%
fraction<40 mm	14.0%
Total	100.0%

In order to specify the fraction<40 mm that presented in the above table, the following assumptions have been taken into consideration:

- Assumptions for the fraction<40 mm, according the waste composition analysis in Zadar County (Spring 2014)

Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:





Table 10: Re-estimation of waste composition analysis (25-29/08/2014) taking into consideration assumptions for the fraction <40 mm from Zadar County waste composition analysis

Kitchen waste	23.8%
Garden waste	5.8%
Paper and Cardboard	21.9%
Plastics	24.0%
Metals	3.6%
Glass	5.5%
Wood	1.0%
Textile	6.0%
Rubber	3.0%
Bones	0.2%
Construction waste	1.2%
Problematic substances (batteries, diapers etc.)	4.0%
Total	100.0%

- Assumptions for the fraction <40 mm, according the waste composition analysis in Sibenik County (Spring 2014)

Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste- Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:





Table 11: Re-estimation of waste composition analysis (25-29/08/2014) taking into consideration assumptions for the fraction <40 mm from Sibenik County waste composition analysis

Kitchen waste	19.5%
Garden waste	7.1%
Paper and Cardboard	21.6%
Plastics	23.2%
Metals	3.1%
Glass	5.4%
Wood	1.0%
Textile	6.0%
Rubber	3.0%
Bones	0.0%
Construction waste	6.0%
Problematic substances (batteries, diapers etc.)	4.0%
Total	100.0%

- Assumptions for the fraction <40 mm waste, mean value from Zadar Study and Sibenik study

Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:





Table 12: Re-estimation of waste composition analysis (25-29/08/2014) taking into consideration assumptions for the fraction<40 mm the mean value from Zadar and Sibenik Counties

Kitchen waste	21.6%
Garden waste	6.5%
Paper and Cardboard	21.8%
Plastics	23.6%
Metals	3.4%
Glass	5.5%
Wood	1.0%
Textile	6.0%
Rubber	3.0%
Bones	0.1%
Construction waste	3.6%
Problematic substances (batteries, diapers etc.)	4.0%
Total	100.0%

2.4. RESULTS FOR WASTE COMPOSITION ANALYSIS DERIVED FROM SAMPLING PERIOD 04-09/08/2014

Table 13: Waste composition analysis (04-09/08/2014)

Metal	5.0%
Wood	2.0%
Textile	7.0%
Paper and cardboard	25.0%
Glass	6.0%
Plastic	22.0%
Rubber	3.0%
Kitchen waste	10.0%
Garden waste	4.0%
Problematic substances (batteries, diapers etc.)	5.0%
fraction<40 mm	11.0%
Total	100.0%

In order to specify the fraction<40 mm that presented in the above table, the following assumptions have been taken into consideration:

- Assumptions for the fraction<40 mm, according the waste composition analysis in Zadar County (Spring 2014)





Paper and Cardboard	6.5%
Plastics	6.9%
Glass	3.9%
Metal	4.0%
Other waste (earth, dust, sand, undefined)	8.5%
Skin and Bones	1.3%
Garden waste	5.9%
Organic waste	63.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

Table 14: Re-estimation of waste composition analysis (04-09/08/2014) taking into consideration assumptions for the fraction <40 mm from Zadar County waste composition analysis

Kitchen waste	16.9%
Garden waste	4.6%
Paper and Cardboard	25.7%
Plastics	22.8%
Metals	5.4%
Glass	6.4%
Wood	2.0%
Textile	7.0%
Rubber	3.0%
Bones	0.1%
Construction waste	0.9%
Problematic substances (batteries, diapers etc.)	5.0%
Total	100.0%

- Assumptions for the fraction <40 mm, according the waste composition analysis in Sibenik County (Spring 2014)





Metal	1.0%
Wood	0.2%
Textile/clothing	0.0%
Paper	4.5%
Glass	2.8%
Plastic	1.5%
Rubber	0.0%
Skin/bones	0.2%
Kitchen waste	32.0%
Garden waste	14.8%
Problematic waste- Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	43.0%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

Kitchen waste	13.5%
Garden waste	5.6%
Paper and Cardboard	25.5%
Plastics	22.2%
Metals	5.1%
Glass	6.3%
Wood	2.0%
Textile	7.0%
Rubber	3.0%
Bones	0.0%
Construction waste	4.7%
Problematic substances (batteries, diapers etc.)	5.0%
Total	100.0%

- Assumptions for the fraction <40 mm waste, mean value from Zadar Study and Sibenik study





Metal	2.5%
Wood	0.1%
Textile/clothing	0.0%
Paper	5.5%
Glass	3.3%
Plastic	4.2%
Rubber	0.0%
Skin/bones	0.7%
Kitchen waste	47.5%
Garden waste	10.4%
Problematic waste-Diapers	0.0%
Other wastes (earth, dust, sand, etc.)	25.8%
Total	100.0%

Taking into consideration this assumption the waste composition analysis is estimated as follows:

Table 15: Re-estimation of waste composition analysis (04-09/08/2014) taking into consideration assumptions for the fraction <40 mm the mean value from Zadar and Sibenik Counties

Kitchen waste	15.2%
Garden waste	5.1%
Paper and Cardboard	25.6%
Plastics	22.5%
Metals	5.3%
Glass	6.4%
Wood	2.0%
Textile	7.0%
Rubber	3.0%
Bones	0.1%
Construction waste	2.8%
Problematic substances (batteries, diapers etc.)	5.0%
Total	100.0%





2.5. SUMMARY OF WASTE COMPOSITION ANALYSIS DERIVED FROM THE FOUR SAMPLING PERIODS

The following tables are summary tables that presents the four waste composition analyzes (including the assumptions that presented in previous paragraphs) and also includes a mean value derived from the waste composition analyzes that elaborated in sampling periods 4-9/8/2014 and 25-29/8/2014.

Table 16: Summary table taking into consideration assumptions for the fractions <20 mm and <40 mm from Zadar County waste composition analysis

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13-18/10/2014	17-22/11/2014
Kitchen waste	16.9%	23.8%	23.8%	23.8%	29.6%
Garden waste	4.6%	5.8%	3.8%	4.8%	3.8%
Paper and Cardboard	25.7%	21.9%	22.9%	22.4%	21.6%
Plastics	22.8%	24.0%	22.0%	23.0%	20.6%
Metals	5.4%	3.6%	3.6%	3.6%	3.7%
Glass	6.4%	5.5%	5.5%	5.5%	5.0%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber	3.0%	3.0%	2.0%	2.5%	1.1%
Skin and bones	0.1%	0.2%	0.2%	0.2%	0.2%
Other waste (earth, dust, sand, undefined)	0.9%	1.2%	1.2%	1.2%	3.4%
Problematic substances (diapers, batteries, etc)	5.0%	4.0%	6.0%	5.0%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Taking into consideration the fact that waste composition analysis of sampling period 17-22/11/2015 has been given in a more detailed format the above table can be presented in the following way





Table 17: Summary table in detail format taking into consideration assumptions for the fractions <20 mm and <40 mm from Zadar County waste composition analysis

	4-9/8/2014	25-29/8/2014	13-18/10/2014	<i>Mean value 25-29/8/2014 & 13- 18/10/2014</i>	17-22/11/2014
Organic waste (kitchen waste)	16.9%	23.8%	23.8%	23.8%	29.6%
Garden waste	4.6%	5.8%	3.8%	4.8%	3.8%
Paper	12.8%	10.9%	11.4%	11.2%	10.7%
Cardboard	6.0%	5.1%	5.4%	5.3%	5.1%
Tetrapak	6.9%	5.9%	6.1%	6.0%	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	9.7%	10.3%	9.4%	9.8%	8.8%
LDPE bags	6.3%	6.6%	6.1%	6.4%	5.7%
Other plastics	6.7%	7.1%	6.5%	6.8%	6.1%
Metals Fe	3.8%	2.5%	2.5%	2.5%	2.6%
Metals Al	1.6%	1.0%	1.0%	1.0%	1.1%
Glass	6.4%	5.5%	5.5%	5.5%	5.0%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber-Leather	3.0%	3.0%	2.0%	2.5%	1.1%
Bones	0.1%	0.2%	0.2%	0.2%	0.2%
Other waste (earth, dust, sand, undefined)	0.9%	1.2%	1.2%	1.2%	3.4%
Hazardous fraction of municipal waste	1.0%	0.8%	1.2%	1.0%	1.2%
Diapers	4.0%	3.2%	4.8%	4.0%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note: the red percentages have been calculated taking into consideration the analysis of period 17-22/11/2014





Table 18: Summary table taking into consideration assumptions for the fractions <20 mm and <40 mm fromSibenik County waste composition analysis

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13-18/10/2014	17-22/11/2014
Kitchen waste	13.5%	19.5%	19.5%	19.5%	24.6%
Garden waste	5.6%	7.1%	5.1%	6.1%	5.2%
Paper and Cardboard	25.5%	21.6%	22.6%	22.1%	21.3%
Plastics	22.2%	23.2%	21.2%	22.2%	19.7%
Metals	5.1%	3.1%	3.1%	3.1%	3.3%
Glass	6.3%	5.4%	5.4%	5.4%	4.8%
Wood	2.0%	1.0%	2.0%	1.5%	1.2%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber	3.0%	3.0%	2.0%	2.5%	1.1%
Skin and bones	0.0%	0.0%	0.0%	0.0%	0.0%
Other waste (earth, dust, sand, undefined)	4.7%	6.0%	6.0%	6.0%	8.9%
Problematic substances (diapers, batteries, etc)	5.0%	4.0%	6.0%	5.0%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 19: Summary table in detail format taking into consideration assumptions for the fractions <20 mm and <40 mm from Sibenik County waste composition analysis

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13-18/10/2014	17-22/11/2014
Organic waste (kitchen waste)	13.5%	19.5%	19.5%	19.5%	24.6%
Garden waste	5.6%	7.1%	5.1%	6.1%	5.2%
Paper	12.5%	10.6%	11.1%	10.8%	10.4%
Cardboard	6.1%	5.1%	5.4%	5.3%	5.1%
Tetrapak	6.9%	5.9%	6.2%	6.0%	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	9.9%	10.4%	9.5%	9.9%	8.8%
LDPE bags	6.4%	6.7%	6.1%	6.4%	5.7%
Other plastics	5.9%	6.1%	5.6%	5.9%	5.2%
Metals Fe	3.6%	2.2%	2.2%	2.2%	2.3%
Metals Al	1.5%	0.9%	0.9%	0.9%	1.0%
Glass	6.3%	5.4%	5.4%	5.4%	4.8%
Wood	2.0%	1.0%	2.0%	1.5%	1.2%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber-Leather	3.0%	3.0%	2.0%	2.5%	1.1%
Bones	0.0%	0.0%	0.0%	0.0%	0.0%
Other waste (earth, dust, sand, undefined)	4.7%	6.0%	6.0%	6.0%	8.9%
Hazardous fraction of municipal waste	1.0%	0.8%	1.2%	1.0%	1.2%
Diapers	4.0%	3.2%	4.8%	4.0%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note: the red percentages have been calculated taking into consideration the analysis of period 17-22/11/2014





Table 20: Summary table taking into consideration assumptions for the fractions <20 mm and <40 mm from mean values of Sibeni County and Zadar County waste composition analysis

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13-18/10/2014	17-22/11/2014
Kitchen waste	15.2%	21.6%	21.6%	21.6%	27.1%
Garden waste	5.1%	6.5%	4.5%	5.5%	4.5%
Paper and Cardboard	25.6%	21.8%	22.8%	22.3%	21.4%
Plastics	22.5%	23.6%	21.6%	22.6%	20.1%
Metals	5.3%	3.4%	3.4%	3.4%	3.5%
Glass	6.4%	5.5%	5.5%	5.5%	4.9%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber	3.0%	3.0%	2.0%	2.5%	1.1%
Skin and bones	0.1%	0.1%	0.1%	0.1%	0.1%
Other waste (earth, dust, sand, undefined)	2.8%	3.6%	3.6%	3.6%	6.2%
Problematic substances (diapers, batteries, etc)	5.0%	4.0%	6.0%	5.0%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 21: Summary table in detail format taking into consideration assumptions for the fractions <20 mm and <40 mm from mean values of Sibeni County and Zadar County waste composition analysis

	4-9/8/2014	25-29/8/2014	13-18/10/2014	Mean value 25-29/8/2014 & 13-18/10/2014	17-22/11/2014
Organic waste (kitchen waste)	15.2%	21.6%	21.6%	21.6%	27.1%
Garden waste	5.1%	6.5%	4.5%	5.5%	4.5%
Paper	12.5%	10.7%	11.2%	10.9%	10.6%
Cardboard	6.1%	5.2%	5.4%	5.3%	5.1%
Tetrapak	7.0%	5.9%	6.2%	6.1%	5.8%
Plastics (PVC, PP, HDPE, PET, PS)	10.0%	10.5%	9.6%	10.1%	8.8%
LDPE bags	6.5%	6.8%	6.2%	6.5%	5.7%
Other plastics	5.9%	6.2%	5.7%	6.0%	5.6%
Metals Fe	3.7%	2.4%	2.4%	2.4%	2.5%
Metals Al	1.5%	1.0%	1.0%	1.0%	1.0%
Glass	6.4%	5.5%	5.5%	5.5%	4.9%
Wood	2.0%	1.0%	2.0%	1.5%	1.1%
Textile	7.0%	6.0%	7.0%	6.5%	4.1%
Rubber-Leather	3.0%	3.0%	2.0%	2.5%	1.1%
Bones	0.1%	0.1%	0.1%	0.1%	0.1%
Other waste (earth, dust, sand, undefined)	2.8%	3.6%	3.6%	3.6%	6.2%
Hazardous fraction of municipal waste	1.0%	0.8%	1.2%	1.0%	1.2%
Diapers	4.0%	3.2%	4.8%	4.0%	4.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note: the red percentages have been calculated taking into consideration the analysis of period 17-22/11/2014





2.6. FINAL RESULTS FOR WASTE COMPOSITION ANALYSIS

In order to estimate an average waste composition analysis that will be used in further calculations of the project the following assumptions have been taken into consideration regarding the share of each sampling period in the total year:

- Waste composition analysis in period 4-9/8/2014 : share 25%
- Waste composition analysis in period 25-29/8/2014 & 13-18/10/2014 (mean value): share 50%
- Waste composition analysis in period 17-22/11/2014: share 25%

Following the above assumptions the following results were obtained:

Table 22: Average waste composition analysis for Split-Dalmatia County taking into consideration assumptions from Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period

	Average waste composition
Kitchen waste	23.5%
Garden waste	4.5%
Paper and Cardboard	23.0%
Plastics	22.3%
Metals	4.1%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber	2.3%
Skin and bones	0.2%
Other waste (earth, dust, sand, undefined)	1.7%
Problematic substances (diapers, batteries, etc)	5.2%
Total	100.0%





Table 23: Average waste composition analysis in detail format for Split-Dalmatia County taking into consideration assumptions from Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period

	Average waste composition
Organic waste (kitchen waste)	23.5%
Garden waste	4.5%
Paper	11.5%
Cardboard	5.4%
Tetrapak	6.2%
Plastics (PVC, PP, HDPE, PET, PS)	9.5%
LDPE bags	6.2%
Other plastics	6.6%
Metals Fe	2.9%
Metals Al	1.2%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber-Leather	2.3%
Bones	0.2%
Other waste (earth, dust, sand, undefined)	1.7%
Hazardous fraction of municipal waste	1.0%
Diapers	4.2%
Total	100.0%

Note: the red percentages have been calculated taking into consideration the analysis of period 17-22/11/2014





Table 24: Average waste composition analysis for Split-Dalmatia County taking into consideration assumptions from Sibenik Waste Composition analysis Report and assumptions regarding the sharing of each sampling period

	Average waste composition
Kitchen waste	19.3%
Garden waste	5.7%
Paper and Cardboard	22.7%
Plastics	21.6%
Metals	3.7%
Glass	5.5%
Wood	1.6%
Textile	6.0%
Rubber	2.3%
Skin and bones	0.0%
Other waste (earth, dust, sand, undefined)	6.4%
Problematic substances (diapers, batteries, etc)	5.2%
Total	100.0%

Table 25: Average waste composition analysis in detail format for Split-Dalmatia County taking into consideration assumptions from Sibenik Waste Composition analysis Report and assumptions regarding the sharing of each sampling period

	Average waste composition
Organic waste (kitchen waste)	19.3%
Garden waste	5.7%
Paper	11.1%
Cardboard	5.4%
Tetrapak	6.2%
Plastics (PVC, PP, HDPE, PET, PS)	9.6%
LDPE bags	6.2%
Other plastics	5.7%
Metals Fe	2.6%
Metals Al	1.1%
Glass	5.5%
Wood	1.6%
Textile	6.0%
Rubber-Leather	2.3%
Bones	0.0%
Other waste (earth, dust, sand, undefined)	6.4%
Hazardous fraction of municipal waste	1.0%
Diapers	4.2%
Total	100.0%

Note: the red percentages have been calculated taking into consideration the analysis of period 17-22/11/2014





Table 26: Average waste composition analysis for Split-Dalmatia County taking into consideration assumptions from mean value of Sibenik and Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period

	Average waste composition
Kitchen waste	21.4%
Garden waste	5.1%
Paper and Cardboard	22.9%
Plastics	21.9%
Metals	3.9%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber	2.3%
Skin and bones	0.1%
Other waste (earth, dust, sand, undefined)	4.0%
Problematic substances (diapers, batteries, etc)	5.2%
Total	100.0%

Table 27: Average waste composition analysis in detail format for Split-Dalmatia County taking into consideration assumptions from mean value of Sibenik and Zadar Waste Composition analysis Report and assumptions regarding the sharing of each sampling period

	Average waste composition
Organic waste (kitchen waste)	21.4%
Garden waste	5.1%
Paper	11.3%
Cardboard	5.4%
Tetrapak	6.2%
Plastics (PVC, PP, HDPE, PET, PS)	9.6%
LDPE bags	6.2%
Other plastics	6.1%
Metals Fe	2.7%
Metals Al	1.1%
Glass	5.6%
Wood	1.5%
Textile	6.0%
Rubber-Leather	2.3%
Bones	0.1%
Other waste (earth, dust, sand, undefined)	4.0%
Hazardous fraction of municipal waste	1.0%
Diapers	4.2%
Total	100.0%

Note: the red percentages have been calculated taking into consideration the analysis of period 17-22/11/2014





The waste composition analysis that presented in tables 27 and 28 constitutes the waste composition analysis for Split Dalmatia County that will be used in further calculations.





3. CALCULATION FOR THE TOTAL PRODUCTION OF MUNICIPAL WASTE IN SPLIT-DALMATIA COUNTY PER TS

Considering the fact that the transport of waste to the Waste Management Center will be implemented through Transfer Stations that will serve specific Towns/Municipalities, in order to calculate more accurate the forecast of produced waste until 2047, the sharing of each Town/Municipality in the 6 Transfer Station was performed. The following table presents the sharing of each Town/Municipality of Split-Dalmatia County in 6 Transfer Stations.

Table 28: Transfer Stations Overview

Transfer Stations	Towns/Municipalities that will be served	Estimation of Population for 2015 (permanent)	Tourist nights (according Bureau of statistics for year 2015)	Tourist nights (according Bureau of statistics for year 2016)
Directly to WMC	Trogir	13,223	391,071	440,886
	Seget	4,741	600,006	694,526
	Okrug	3,600	641,927	557,687
	Marina	4,673	264,598	293,680
	Total	26,237	1,897,602	1,986,779
Split	Split	173,109	1,339,598	1,717,396
	Kastela	40,586	277,370	356,895
	Solin	25,564	32,079	46,129
	Dugopolje	3,782	29,399	34,272
	Podstrana	10,862	483,055	497,943
	Omis	14,798	759,457	829,440
	DugiRat	7,060	243,977	300,006
	Zadvarje	301	1,000	1,485
	Sestanovac	1,769	1,137	5,087
	Klis	5,020	0	5,747
	Solta	2,050	109,159	128,344
	Total	284,901	3,276,231	3,922,744
	Sinj	Sinj	24,617	15,764
Hrvace		3,150	915	2,124
Dicmo		2,867	3,085	4,686
Trilj		8,621	11,812	13,128
Otok		5,253	0	1,664
Vrlika		1,930	0	0
Total		46,438	31,576	36,405
Zagvozd	Gradimotski	10,587	18,769	13,382
	Vrgorac	5,911	6,192	5,623
	Baskavoda	2,883	982,762	1,050,319
	Brela	1,714	568,889	583,081
	Makarska	14,217	1,115,435	1,346,104
	Tucepi	1,991	664,133	677,623
	Podgora	2,508	892,369	919,825
	CistaProvo	1,992	1,500	2,966
	Lovrec	1,442	0	457
	Lokvicici	665	0	0





Annex 4.1. Waste content and future generation forecast

Transfer Stations	Towns/Municipalities that will be served	Estimation of Population for 2015 (permanent)	Tourist nights (according Bureau of statistics for year 2015)	Tourist nights (according Bureau of statistics for year 2016)
	Prolozac	3,464	0	4,003
	Podbablje	4,428	0	7,840
	Zmizavci	1,957	0	5,024
	Runovici	2,243	0	711
	Zagvozd	1,006	0	3,241
	Gradac	3,077	899,090	870,751
	Total	60,085	5,149,139	5,490,949
Brac	Pucisca	2,153	23,444	25,579
	Nerezisca	890	0	9,157
	Selca	1,802	73,342	86,774
	Bol	1,751	562,052	655,864
	Sutivan	907	91,554	101,343
	Postira	1,582	86,643	121,925
	Milna	1,161	61,910	74,725
	Supetar	4,362	498,962	633,256
Total	14,608	1,397,907	1,708,623	
Vis	Vis	2,035	139,030	161,978
	Komiza	1,524	74,864	102,767
	Total	3,559	213,894	264,745
Hvar	StariGrad	2,867	196,508	210,189
	Hvar	4,440	586,538	655,868
	Jelsa	3,691	472,582	546,286
	Sucuraj	500	66,590	56,759
	Total	11,498	1,322,218	1,469,102
Directly to WMC	Muc	3,738	0	480
	Lecevisa	471	238	651
	Prgomet	579	0	182
	PrimorskiDolac	727	0	230
	Total	5,515	238	1,543
TOTAL		452,841	13,288,805	14,880,891

According the data that presented in the above table and the assumptions that have been taken into consideration for the forecast of population (permanent and seasonal) and the forecast of waste production rate (calculated with the low scenario), the following tables resulting:





Table 29: Forecast of produced municipal waste for the towns/municipalities of Trogir, Seget, Okrug and Marina

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Permanent population	26,237	26,232	26,227	26,221	26,216	26,211	26,206	26,156	26,106	26,056	26,007	25,958	25,908	25,859	25,810	25,761	25,712	25,645	25,578	25,512	25,445	25,379	25,313	25,248	25,182	25,116	25,051	24,966	24,881	24,796	24,712	24,628	24,544	
Tourist nights	2,182,242	2,284,796	2,136,386	2,214,934	2,293,482	2,372,029	2,450,577	2,529,125	2,607,673	2,686,221	2,764,769	2,843,316	2,921,864	3,000,412	3,078,960	3,157,508	3,236,056	3,314,603	3,393,151	3,471,699	3,550,247	3,628,795	3,707,343	3,785,890	3,864,438	3,942,986	4,021,534	4,100,082	4,178,630	4,257,177	4,335,725	4,414,273	4,492,821	
Seasonal population	5,979	6,260	5,853	6,068	6,284	6,499	6,714	6,929	7,144	7,360	7,575	7,790	8,005	8,220	8,436	8,651	8,866	9,081	9,296	9,512	9,727	9,942	10,157	10,372	10,588	10,803	11,018	11,233	11,448	11,663	11,879	12,094	12,309	
Total population	32,216	32,491	32,080	32,290	32,500	32,709	32,919	33,085	33,250	33,416	33,582	33,747	33,913	34,079	34,245	34,412	34,578	34,726	34,875	35,023	35,172	35,321	35,470	35,620	35,769	35,919	36,069	36,199	36,329	36,460	36,591	36,722	36,854	
Waste production t	18,108	18,110	17,821	17,701	17,582	17,464	17,346	17,202	17,125	17,048	16,971	16,894	16,818	16,742	16,667	16,592	16,617	16,632	16,647	16,662	16,677	16,692	16,708	16,723	16,739	16,755	16,770	16,775	16,780	16,785	16,790	16,795	16,800	16,768
(kg/ca/year)	562	557	556	548	541	534	527	520	515	510	505	501	496	491	487	482	481	479	477	476	474	473	471	469	468	466	465	463	462	460	459	457	456	

Table 30: Forecast of produced municipal waste for the towns/municipalities that will be served from Split TS

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047	
Permanent population	284,901	284,844	284,787	284,730	284,673	284,616	284,559	284,019	283,479	282,940	282,403	281,866	281,331	280,796	280,263	279,730	279,199	278,673	277,749	277,027	276,306	275,588	274,871	274,157	273,444	272,733	272,024	271,099	270,177	269,259	268,343	267,431	266,522		
Tourist nights	3,767,665	4,511,156	4,218,131	4,373,218	4,528,305	4,683,392	4,838,478	4,993,565	5,148,652	5,303,738	5,458,825	5,613,912	5,768,999	5,924,085	6,079,172	6,234,259	6,389,346	6,544,432	6,699,519	6,854,606	7,009,693	7,164,779	7,319,866	7,474,953	7,630,039	7,785,126	7,940,213	8,095,300	8,250,386	8,405,473	8,560,560	8,715,647	8,870,733		
Seasonal population	10,322	12,359	11,557	11,981	12,406	12,831	13,256	13,681	14,106	14,531	14,956	15,381	15,805	16,230	16,655	17,080	17,505	17,930	18,355	18,780	19,205	19,630	20,054	20,479	20,904	21,329	21,754	22,179	22,604	23,029	23,454	23,878	24,303		
Total population	295,223	297,203	296,344	296,712	297,079	297,447	297,815	297,700	297,585	297,471	297,358	297,247	297,136	297,027	296,918	296,810	296,704	296,603	296,504	296,406	296,309	296,213	296,117	296,021	295,925	295,829	295,733	295,637	295,541	295,445	295,349	295,253	295,157	295,061	
Waste production t	131,321	131,335	129,239	128,371	127,507	126,649	125,795	124,952	124,192	123,632	123,074	122,520	121,967	121,418	120,871	120,326	120,508	120,616	120,725	120,834	120,944	121,056	121,167	121,280	121,393	121,507	121,621	121,735	121,849	121,963	122,077	122,191	122,305	121,605	

Table 31: Forecast of produced municipal waste for the towns/municipalities that will be served from Sinj TS

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Permanent population	46,438	46,429	46,419	46,410	46,401	46,392	46,382	46,294	46,206	46,118	46,031	45,943	45,856	45,769	45,682	45,595	45,509	45,390	45,272	45,154	45,037	44,920	44,803	44,687	44,571	44,455	44,339	44,188	44,038	43,888	43,739	43,590	43,442	
Tourist nights	36,313	41,866	39,146	40,586	42,025	43,464	44,904	46,343	47,782	49,221	50,661	52,100	53,539	54,979	56,418	57,857	59,296	60,736	62,175	63,614	65,054	66,493	67,932	69,372	70,811	72,250	73,689	75,129	76,568	78,007	79,447	80,886	82,325	
Seasonal population	99	115	107	111	115	119	123	127	131	135	139	143	147	151	155	159	162	166	170	174	178	182	186	190	194	198	202	206	210	214	218	222	226	
Total population	46,537	46,543	46,527	46,521	46,516	46,511	46,505	46,421	46,337	46,253	46,170	46,086	46,003	45,920	45,837	45,754	45,671	45,557	45,443	45,329	45,215	45,102	44,989	44,877	44,765	44,653	44,541	44,394	44,248	44,102	43,957	43,812	43,668	
Waste production t	31,868	31,872	31,363	31,152	30,943	30,734	30,527	30,275	30,138	30,002	29,867	29,732	29,598	29,465	29,332	29,200	29,244	29,270	29,297	29,323	29,350	29,377	29,404	29,431	29,459	29,486	29,514	29,522	29,531	29,539	29,548	29,558	29,567	29,510
(kg/ca/year)	685	685	674	670	665	661	656	652	650	649	647	645	643	642	640	638	640	643	645	647	649	651	654	656	658	660	663	665	667	670	672	675	677	

Table 32: Forecast of produced municipal waste for the towns/municipalities that will be served from Zagvozd TS

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047	
Permanent population	60,085	60,073	60,061	60,049	60,037	60,025	60,013	59,899	59,785	59,672	59,558	59,445	59,332	59,219	59,107	58,994	58,882	58,729	58,577	58,424	58,272	58,121	57,970	57,819	57,669	57,519	57,369	57,174	56,980	56,786	56,593	56,401	56,209		
Tourist nights	5,921,510	6,314,592	5,904,424	6,121,511	6,338,597	6,555,683	6,772,769	6,989,855	7,206,941	7,424,028	7,641,114	7,858,200	8,075,286	8,292,372	8,509,458	8,726,544	8,943,631	9,160,717	9,377,803	9,594,889	9,811,975	10,029,061	10,246,148	10,463,234	10,680,320	10,897,406	11,114,492	11,331,578	11,548,664	11,765,751	11,982,837	12,199,923	12,417,009		
Seasonal population	16,223	17,300	16,177	16,771	17,366	17,961	18,556	19,150	19,745	20,340	20,935	21,529	22,124	22,719	23,314	23,908	24,503	25,098	25,693	26,288	26,882	27,477	28,072	28,666	29,261	29,856	30,451	31,045	31,640	32,235	32,830	33,424	34,019		
Total population	76,308	77,373	76,237	76,820	77,403	77,986	78,569	79,152	79,735	80,318	80,901	81,484	82,067	82,650	83,233	83,816	84,399	84,982	85,565	86,148	86,731	87,314	87,897	88,480	89,063	89,646	90,229	90,812	91,395	91,978	92,561	93,144	93,727	94,310	
Waste production t	27,958	27,961	27,515	27,330	27,146	26,963	26,781	26,600	26,440	26,321	26,202	26,084	25,967	25,850	25,733	25,617	25,506	25,479	25,452	25,425	25,398	25,371	25,344	25,317	25,290	25,263	25,236	25,209	25,182	25,155	25,128	25,101	25,074	25,047	25,889
(kg/ca/year)	366	361	361	356	351	346	341	336	332	329	326	322	319	315	312	309	308	306	305	304	302	301	300	299	297	296	295	294	292	291	290	289	287		

Table 33: Forecast of produced municipal waste for the towns/municipalities that will be served from Brac TS

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Permanent population	14,608	14,605	14,602	14,599	14,596	14,593	14,590	14,563	14,535	14,507	14,480	14,452	14,425	14,398	14,370	14,343	14,316	14,278	14,241	14,204	14,167	14,130	14,094	14,057	14,021	13,984	13,948	13,900	13,853	13,806	13,759	13,712	13,666	
Tourist nights	1,607,593	1,964,916	1,837,284	1,904,835	1,972,386	2,039,937	2,107,488	2,175,039	2,242,590	2,310,140	2,377,691	2,445,242	2,512,793	2,580,344	2,647,895	2,715,446	2,782,997	2,850,547	2,918,098	2,985,649	3,053,200	3,120,751	3,188,302	3,255,853	3,323,403	3,390,954	3,458,505	3,526,056	3,593,607	3,661,158	3,728,709	3,796,260	3,863,811	
Seasonal population	4,404	5,383	5,034	5,219	5,404	5,589	5,774	5,959	6,144	6,329	6,514	6,699	6,884	7,069	7,255	7,440	7,625	7,810	7,995	8,180	8,365	8,550	8,735	8,920										



Table 35: Forecast of produced municipal waste for the towns/municipalities that will be served from Hvar TS

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Permanent population corresponds to TS Hvar	11,498	11,496	11,493	11,491	11,489	11,487	11,484	11,462	11,441	11,419	11,397	11,376	11,354	11,332	11,311	11,289	11,268	11,239	11,209	11,180	11,151	11,122	11,093	11,064	11,036	11,007	10,978	10,941	10,904	10,867	10,830	10,793	10,756	
Tourist nights	1,520,551	1,689,467	1,579,727	1,637,808	1,695,890	1,753,971	1,812,053	1,870,134	1,928,215	1,986,297	2,044,378	2,102,459	2,160,541	2,218,622	2,276,703	2,334,785	2,392,866	2,450,947	2,509,029	2,567,110	2,625,191	2,683,273	2,741,354	2,799,435	2,857,517	2,915,598	2,973,679	3,031,761	3,089,842	3,147,923	3,206,005	3,264,086	3,322,167	
Seasonal population	4,166	4,629	4,328	4,487	4,646	4,805	4,965	5,124	5,283	5,442	5,601	5,760	5,919	6,078	6,238	6,397	6,556	6,715	6,874	7,033	7,192	7,351	7,511	7,670	7,829	7,988	8,147	8,306	8,465	8,624	8,784	8,943	9,102	
Total population	15,664	16,124	15,821	15,978	16,135	16,292	16,449	16,586	16,723	16,861	16,998	17,136	17,273	17,411	17,548	17,686	17,824	17,953	18,083	18,213	18,343	18,474	18,604	18,734	18,864	18,995	19,125	19,247	19,369	19,491	19,613	19,736	19,858	
Waste production t	11,107	11,109	10,931	10,858	10,785	10,712	10,640	10,552	10,504	10,457	10,410	10,363	10,316	10,270	10,224	10,178	10,133	10,202	10,211	10,220	10,230	10,239	10,249	10,258	10,268	10,277	10,287	10,290	10,293	10,296	10,299	10,302	10,305	10,286
(kg/ca/year)	709	689	691	680	668	658	647	636	628	620	612	605	597	590	583	575	572	568	565	561	558	554	551	548	544	541	538	535	531	528	525	522	519	

Table 36: Forecast of produced municipal waste for the towns/municipalities that will be transferred directly to WMC without TS

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Permanent population Muc, Lecevice, Prgomet, Primorski Dalac)	5,515	5,514	5,513	5,512	5,511	5,509	5,508	5,498	5,487	5,477	5,467	5,456	5,446	5,436	5,425	5,415	5,405	5,391	5,377	5,363	5,349	5,335	5,321	5,307	5,293	5,279	5,266	5,248	5,230	5,212	5,194	5,177	5,159	
Tourist nights	274	1,775	1,660	1,721	1,782	1,843	1,904	1,965	2,026	2,087	2,148	2,209	2,270	2,331	2,392	2,453	2,514	2,575	2,636	2,697	2,758	2,819	2,880	2,941	3,002	3,063	3,124	3,185	3,246	3,307	3,368	3,429	3,490	
Seasonal population	1	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	10	
Total population	5,516	5,519	5,517	5,516	5,515	5,515	5,514	5,503	5,493	5,483	5,473	5,462	5,452	5,442	5,432	5,422	5,412	5,398	5,384	5,370	5,356	5,342	5,329	5,315	5,301	5,288	5,274	5,257	5,239	5,221	5,204	5,186	5,169	
Waste production t	1,750	1,750	1,722	1,711	1,699	1,688	1,676	1,663	1,655	1,648	1,640	1,633	1,625	1,618	1,611	1,604	1,606	1,607	1,609	1,610	1,612	1,613	1,615	1,616	1,618	1,619	1,621	1,621	1,622	1,622	1,623	1,623	1,624	1,621
(kg/ca/year)	317	317	312	310	308	306	304	302	301	301	300	299	298	297	297	296	297	298	299	300	301	302	303	304	305	306	307	308	310	311	312	313	314	

Table 37: Forecast of produced municipal waste for the total Split-Dalmatia County

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Permanent population	452,841	452,750	452,660	452,569	452,479	452,388	452,298	451,438	450,581	449,725	448,870	448,017	447,166	446,316	445,468	444,622	443,777	442,923	441,473	440,325	439,180	438,038	436,899	435,763	434,630	433,500	432,373	430,903	429,438	427,978	426,523	425,073	423,627	438,516
Tourist nights	15,282,126	17,113,025	16,001,440	16,589,760	17,178,080	17,766,400	18,354,720	18,943,040	19,531,360	20,119,680	20,708,000	21,296,320	21,884,640	22,472,960	23,061,280	23,649,600	24,237,920	24,826,240	25,414,560	26,002,880	26,591,200	27,179,520	27,767,840	28,356,160	28,944,480	29,532,800	30,121,120	30,709,440	31,297,760	31,886,080	32,474,400	33,062,720	33,651,040	
Seasonal population	41,869	46,885	43,840	45,451	47,063	48,675	50,287	51,899	53,511	55,122	56,734	58,346	59,958	61,570	63,182	64,793	66,405	68,017	69,629	71,241	72,853	74,464	76,076	77,688	79,300	80,912	82,524	84,135	85,747	87,359	88,971	90,583	92,195	72,859
Total population	494,710	499,635	496,499	498,021	499,542	501,063	502,585	503,337	504,091	504,847	505,604	506,363	507,124	507,886	508,650	509,416	510,183	510,941	511,702	512,466	513,233	514,003	514,775	515,549	516,326	517,106	517,889	518,675	519,464	520,256	521,051	521,848	522,648	511,368
Waste production t	246,396	246,423	242,489	240,860	239,240	237,629	236,027	234,076	233,020	231,969	230,923	229,882	228,846	227,815	226,788	225,767	226,107	226,310	226,514	226,720	226,927	227,135	227,345	227,556	227,768	227,981	228,196	228,259	228,324	228,391	228,461	228,532	228,606	228,166
(kg/ca/year)	498	493	488	484	479	474	470	465	462	459	457	454	451	449	446	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443



4. ANALYTICAL CALCULATIONS OF GOALS ACCORDING NWMP OF RC 2017-2022 AND OF WASTE THAT WILL BE TREATED IN LECEVICA WMC

Goal 1.1 of WMP of RC	-5.00%																																		
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047	
Total Produced MUNICIPAL WASTE (EWC 20 & 15 01) (t)	246,396	246,423	242,489	240,860	239,240	237,629	236,027	234,076	233,020	231,969	230,923	229,882	228,846	227,815	226,788	225,767	226,107	226,310	226,514	226,720	226,927	227,135	227,345	227,556	227,768	227,981	228,196	228,259	228,324	228,391	228,461	228,532	228,606	228,166	
(1) Bulky waste (EWC 20 03 07) (t)	14,504	14,506	14,274	14,178	14,083	13,988	13,894	13,779	13,717	13,655	13,593	13,532	13,471	13,410	13,350	13,290	13,310	13,322	13,334	13,346	13,358	13,370	13,383	13,395	13,407	13,420	13,433	13,436	13,440	13,444	13,448	13,452	13,457	13,431	
(2) Garden and park biodegradable waste EWC 20 02 01 (t)	2,498	2,498	2,458	2,442	2,425	2,409	2,393	2,373	2,362	2,352	2,341	2,331	2,320	2,310	2,299	2,289	2,292	2,294	2,296	2,299	2,301	2,303	2,305	2,307	2,309	2,311	2,313	2,314	2,315	2,316	2,317	2,318	2,318	2,313	
(3) Special waste EWC 20 01 21', 20 01 23', 20 01 33', 20 01 35' (t)	969	969	953	947	941	934	928	920	916	912	908	904	900	896	892	888	889	890	891	891	892	893	894	895	896	896	897	897	898	898	899	899	899	897	
(4) Waste from markets EWC 20 03 02 (t)	90	90	89	88	87	87	86	85	85	85	84	84	84	83	83	82	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	84	83	
RECYCLABLE WASTE collected at source (t)	23,032	24,442	27,840	32,592	39,434	51,106	73,211	106,874	106,392	105,912	105,434	104,959	104,486	104,015	103,547	103,080	103,235	103,328	103,421	103,515	103,610	103,705	103,801	103,897	103,994	104,091	104,189	104,218	104,248	104,278	104,310	104,343	104,377	104,175	
Paper	6.650%	7.048%	7.853%	8.764%	9.797%	10.970%	15.289%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	21.494%	
Paper packaging	4.368%	4.769%	5.166%	5.597%	6.064%	6.570%	8.455%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%	10.882%
Paper non packaging	2.282%	2.279%	2.687%	3.167%	3.733%	4.400%	6.833%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%	10.612%
Plastic	1.120%	1.176%	1.719%	2.534%	3.776%	5.700%	9.578%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%	16.268%
Plastic packaging	1.043%	1.079%	1.533%	2.179%	3.096%	4.400%	6.977%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%	11.062%
Plastic non packaging	0.077%	0.097%	0.186%	0.355%	0.680%	1.300%	2.601%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	5.206%	
Glass	1.452%	1.472%	1.646%	1.869%	2.208%	2.857%	3.799%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	5.086%	
Glass packaging	1.442%	1.464%	1.622%	1.798%	1.992%	2.207%	2.803%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	3.560%	
Glass non packaging	0.010%	0.008%	0.024%	0.072%	0.216%	0.650%	0.995%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	1.526%	
Metal Fe + Al	0.126%	0.222%	0.262%	0.364%	0.702%	1.980%	2.353%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	2.810%	
Metal Fe + Al packaging	0.003%	0.007%	0.026%	0.105%	0.419%	1.670%	1.924%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	2.216%	
Metal Fe + Al non packaging	0.123%	0.216%	0.236%	0.258%	0.283%	0.310%	0.429%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	0.594%	
RECYCLABLE WASTE collected at source (% of produced waste)	9.35%	9.92%	11.48%	13.53%	16.48%	21.51%	31.02%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%	45.66%		
BIOWASTE collected at source (t)	2,588	2,588	2,547	2,530	2,513	5,107	10,377	21,056	20,961	20,866	20,772	20,679	20,585	20,493	20,400	20,309	20,339	20,357	20,376	20,394	20,413	20,432	20,450	20,469	20,489	20,508	20,527	20,533	20,539	20,545	20,551	20,557	20,564		
BIOWASTE collected at source (% of produced waste)	4.67%	4.67%	4.67%	4.67%	4.67%	9.56%	19.55%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	
Goal 1.3 of WMP of RC	4.67%	4.67%	4.67%	4.67%	4.67%	9.56%	19.55%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	
Remaining MUNICIPAL WASTE (after sorting at source) (t)	205,303	203,919	196,874	190,613	182,270	166,495	137,617	91,447	91,034	90,624	90,215	89,809	89,404	89,001	88,600	88,201	88,334	88,413	88,493	88,573	88,654	88,735	88,817	88,900	88,983	89,066	89,150	89,174	89,200	89,226	89,253	89,281	89,310		
Biowaste collecte at source (t)																																			
Garden and park biodegradable waste EWC 20 02 01 (t)	2,498	2,498	2,458	2,442	2,425	2,409	2,393	2,373	2,362	2,352	2,341	2,331	2,320	2,310	2,299	2,289	2,292	2,294	2,296	2,299	2,301	2,303	2,305	2,307	2,309	2,311	2,313	2,314	2,315	2,316	2,317	2,318	2,318		
Waste from markets EWC 20 03 02 (t)	90	90	89	88	87	87	86	85	85	85	84	84	84	83	83	82	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	84	
Other biowaste	0	0	0	0	0	2,611	7,898	18,597	18,513	18,430	18,347	18,264	18,182	18,100	18,018	17,937	17,964	17,980	17,997	18,013	18,029	18,046	18,063	18,079	18,096	18,113	18,130	18,135	18,140	18,146	18,151	18,157	18,163		
Total	2,588	2,588	2,547	2,530	2,513	5,107	10,377	21,056	20,961	20,866	20,772	20,679	20,585	20,493	20,400	20,309	20,339	20,357	20,376	20,394	20,413	20,432	20,450	20,469	20,489	20,508	20,527	20,533	20,539	20,545	20,551	20,557	20,564		
	4.7%	4.7%	4.7%	4.7%	4.7%	9.6%	19.6%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	



Feasibility study for development of the integrated and sustainable waste management system in Split-Dalmatia County



Annex 4.1. Waste content and future generation forecast

Produced RECYCLABLES & BIOWASTE (t)		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Paper		64,193	64,200	63,175	62,751	62,329	61,909	61,492	60,984	60,708	60,435	60,162	59,891	59,621	59,352	59,085	58,819	58,507	58,960	59,014	59,067	59,121	59,175	59,230	59,285	59,340	59,396	59,452	59,468	59,485	59,503	59,521	59,539	59,559	59,444
Paper packaging		32,501	32,505	31,986	31,771	31,557	31,345	31,133	30,876	30,737	30,598	30,460	30,323	30,186	30,050	29,915	29,780	29,825	29,879	29,906	29,933	29,960	29,988	29,988	30,016	30,044	30,072	30,100	30,109	30,117	30,126	30,135	30,145	30,155	30,096
Paper non packaging		31,692	31,696	31,190	30,980	30,772	30,565	30,359	30,108	29,972	29,837	29,702	29,568	29,435	29,302	29,170	29,039	29,083	29,109	29,135	29,161	29,188	29,215	29,242	29,269	29,296	29,324	29,351	29,359	29,368	29,376	29,385	29,395	29,404	29,347
Plastic		48,583	48,588	47,812	47,491	47,172	46,854	46,538	46,154	45,945	45,738	45,532	45,327	45,122	44,919	44,717	44,515	44,382	44,622	44,663	44,703	44,744	44,785	44,826	44,868	44,910	44,952	44,994	45,007	45,020	45,033	45,046	45,061	45,075	44,988
Plastic packaging		33,036	33,040	32,512	32,294	32,077	31,861	31,646	31,384	31,243	31,102	30,962	30,822	30,683	30,545	30,407	30,270	30,316	30,343	30,371	30,398	30,426	30,454	30,482	30,510	30,539	30,567	30,596	30,605	30,613	30,622	30,632	30,641	30,651	30,592
Plastic non packaging		15,547	15,548	15,300	15,197	15,095	14,993	14,892	14,789	14,703	14,636	14,570	14,505	14,439	14,374	14,309	14,245	14,266	14,279	14,292	14,305	14,318	14,331	14,344	14,358	14,371	14,385	14,402	14,406	14,410	14,415	14,419	14,424	14,396	
Glass		15,190	15,191	14,949	14,848	14,748	14,649	14,550	14,430	14,365	14,300	14,236	14,172	14,108	14,044	13,981	13,918	13,939	13,951	13,964	13,977	13,989	14,002	14,015	14,028	14,041	14,054	14,068	14,071	14,076	14,080	14,084	14,088	14,093	14,066
Glass packaging		10,633	10,634	10,464	10,394	10,324	10,254	10,185	10,101	10,055	9,965	9,920	9,875	9,831	9,787	9,743	9,757	9,766	9,775	9,784	9,793	9,802	9,811	9,820	9,829	9,838	9,847	9,856	9,865	9,874	9,883	9,892	9,901	9,910	9,846
Glass non packaging		4,557	4,557	4,485	4,454	4,425	4,395	4,365	4,329	4,309	4,290	4,271	4,251	4,232	4,213	4,194	4,175	4,182	4,185	4,189	4,193	4,197	4,201	4,205	4,208	4,212	4,216	4,220	4,221	4,223	4,224	4,225	4,227	4,228	4,220
Metal		8,394	8,395	8,261	8,205	8,150	8,095	8,041	7,974	7,938	7,902	7,867	7,831	7,796	7,761	7,726	7,691	7,703	7,710	7,717	7,724	7,731	7,738	7,745	7,752	7,759	7,767	7,774	7,776	7,778	7,780	7,783	7,785	7,788	7,773
Metal packaging		6,619	6,619	6,514	6,470	6,426	6,383	6,340	6,288	6,259	6,231	6,203	6,175	6,147	6,119	6,092	6,064	6,074	6,079	6,085	6,090	6,096	6,101	6,107	6,112	6,118	6,124	6,130	6,131	6,133	6,135	6,137	6,139	6,141	6,129
Metal non packaging		1,775	1,775	1,747	1,735	1,724	1,712	1,701	1,687	1,679	1,671	1,664	1,656	1,649	1,641	1,634	1,627	1,629	1,631	1,632	1,634	1,635	1,637	1,638	1,640	1,641	1,644	1,644	1,645	1,646	1,646	1,647	1,647	1,647	1,644
Biowaste		55,410	55,417	54,532	54,166	53,801	53,439	53,079	52,640	52,402	52,166	51,931	51,697	51,464	51,232	51,001	50,771	50,848	50,893	50,939	50,986	51,032	51,079	51,126	51,174	51,221	51,269	51,318	51,332	51,346	51,361	51,377	51,393	51,410	51,311
Total Recyclables		136,360	136,375	134,197	133,296	132,400	131,508	130,621	129,541	128,957	128,375	127,797	127,220	126,647	126,076	125,508	124,943	125,131	125,244	125,357	125,471	125,585	125,700	125,816	125,933	126,050	126,169	126,288	126,322	126,356	126,390	126,424	126,458	126,492	126,271
Total Recyclables+Biowaste		191,770	191,791	188,729	187,462	186,201	184,947	183,700	182,181	181,359	180,541	179,727	178,917	178,111	177,308	176,509	175,714	175,979	176,137	176,296	176,456	176,617	176,779	176,942	177,107	177,272	177,438	177,605	177,757	177,910	178,063	178,216	178,369	178,522	177,581
Total packaging		82,789	82,798	81,476	80,929	80,384	79,843	79,305	78,649	78,294	77,941	77,590	77,240	76,892	76,545	76,201	75,857	75,972	76,040	76,108	76,178	76,247	76,317	76,387	76,458	76,530	76,601	76,674	76,747	76,820	76,893	76,966	77,039	77,112	76,663
Collected RECYCLABLES & BIOWASTE (t)		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047
Paper		16,385	17,368	19,043	21,110	23,439	26,068	30,085	50,312	50,085	49,859	49,635	49,411	49,188	48,966	48,746	48,526	48,599	48,643	48,687	48,731	48,776	48,820	48,865	48,911	48,956	49,002	49,048	49,062	49,076	49,090	49,105	49,121	49,137	49,042
Paper packaging		10,762	11,751	12,528	13,482	14,508	15,612	19,957	25,472	25,357	25,243	25,129	25,016	24,903	24,791	24,679	24,568	24,605	24,627	24,649	24,672	24,694	24,717	24,740	24,763	24,786	24,809	24,832	24,839	24,846	24,854	24,861	24,869	24,877	24,829
Paper non packaging		5,624	5,617	6,515	7,628	8,931	10,456	16,128	24,840	24,728	24,617	24,506	24,395	24,285	24,176	24,067	23,958	23,994	24,016	24,038	24,060	24,081	24,104	24,126	24,148	24,171	24,193	24,216	24,223	24,230	24,237	24,244	24,252	24,260	24,213
Plastic		2,759	2,898	4,169	6,104	9,034	13,945	22,907	38,078	37,907	37,736	37,566	37,396	37,228	37,060	36,893	36,727	36,782	36,815	36,848	36,882	36,916	36,949	36,984	37,018	37,052	37,087	37,122	37,143	37,143	37,154	37,165	37,177	37,189	37,117
Plastic packaging		2,570	2,659	3,718	5,248	7,408	10,456	16,467	25,893	25,777	25,660	25,545	25,430	25,315	25,201	25,087	24,974	25,012	25,034	25,057	25,080	25,103	25,126	25,149	25,172	25,196	25,219	25,243	25,250	25,257	25,265	25,272	25,280	25,288	25,240
Plastic non packaging		189	239	450	856	1,626	3,089	6,140	12,185	12,130	12,075	12,021	11,967	11,913	11,859	11,806	11,753	11,770	11,781	11,791	11,802	11,813	11,824	11,835	11,846	11,857	11,868	11,879	11,882	11,886	11,889	11,893	11,896	11,900	11,877
Glass		3,577	3,628	3,992	4,502	5,281	6,788	8,966	11,905	11,851	11,797	11,744	11,691	11,639	11,586	11,534	11,482	11,499	11,510	11,520	11,531	11,541	11,552	11,562	11,573	11,584	11,595	11,606	11,609	11,612	11,616	11,619	11,623	11,626	11,604
Glass packaging		3,553	3,608	3,934	4,330	4,765	5,244	6,616	8,333	8,296	8,258	8,221	8,184	8,147	8,110	8,074	8,037	8,049	8,057	8,064	8,071	8,079	8,086	8,093	8,101	8,109	8,116	8,124	8,126	8,128	8,131	8,133	8,136	8,138	8,123
Glass non packaging		24	19	58	173	516	1,543	2,350	3,572	3,555	3,539	3,523	3,508	3,492	3,476	3,460	3,445	3,450	3,453	3,456	3,459	3,462	3,466	3,469	3,472	3,475	3,479	3,482	3,484	3,487	3,488	3,489	3,490	3,491	3,492
Metal		311	547	636	876	1,680	4,705	5,554	6,578	6,549	6,519	6,490	6,461	6,431	6,402	6,374	6,345	6,354	6,360	6,366	6,372	6,378	6,383	6,389	6,395	6,401	6,407	6,413	6,415	6,417	6,419	6,421	6,423	6,425	6,412
Metal packaging		8	16	64	254	1,003	3,968	4,540	5,187	5,164	5,140	5,117	5,094	5,071	5,048	5,026	5,003	5,010	5,015	5,020	5,024	5,029	5,033	5,038	5,043	5,047	5,052	5,057	5,062	5,067	5,072	5,077	5,082	5,087	5,092
Metal non packaging		303	531	572	623	677	737	1,013	1,391	1,385	1,379	1,373	1,366	1,360	1,354	1,348	1,342	1,344	1,345	1,346	1,347	1,348	1,349	1,350	1,351	1,352	1,353	1,354	1,355	1,356	1,357	1,358	1,359	1,360	1,361
Biowaste		2,588	2,588	2,547	2,530	2,513	5,107	10,377	21,056	20,961	20,866	20,772	20,679	20,585	20,493	20,400	20,309	20,339	20,357	20,376	20,394	20,413	20,432	20,450	20,469	20,489	20,508	20,527	20,533	20,539	20,545	20,551	20,557	20,564	20,524
Total Recyclables collected		23,032	24,442	27,840	32,592	39,434	51,106	73,211	106,874	106,392	105,912	105,434	104,959	104,486	104,015	103,547	103,080	103,235	103,328	103,421	103,515	103,610	103,705	103,800	103,897	103,994	104,091	104,189	104,218	104,248	104,278	104,308	104,338	104,368	104,175



Feasibility study for development of the integrated and sustainable waste management system in Split-Dalmatia County



Annex 4.1. Waste content and future generation forecast

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Average 2023-2047	
Produced MUNICIPAL WASTE (t)	246,396	246,423	242,489	240,860	239,240	237,629	236,027	234,076	233,020	231,969	230,923	229,882	228,846	227,815	226,788	225,767	225,107	226,310	226,514	226,720	226,927	227,135	227,345	227,556	227,768	227,981	228,196	228,259	228,324	228,391	228,461	228,532	228,606	228,166	
Analysis per material (t)																																			
Kitchen and biowaste	55,410	55,417	54,532	54,166	53,801	53,439	53,079	52,640	52,402	52,166	51,931	51,697	51,464	51,232	51,001	50,771	50,848	50,893	50,939	50,986	51,032	51,079	51,126	51,174	51,221	51,269	51,318	51,332	51,346	51,361	51,377	51,393	51,410		
Paper/Cardboard	64,193	64,200	63,175	62,751	62,329	61,909	61,492	60,984	60,708	60,435	60,162	59,891	59,621	59,352	59,085	58,819	58,907	58,960	59,014	59,067	59,121	59,175	59,230	59,285	59,340	59,396	59,452	59,468	59,485	59,503	59,521	59,539	59,559		
Paper/Cardboard packaging	32,501	32,505	31,986	31,771	31,557	31,345	31,133	30,876	30,737	30,598	30,460	30,322	30,186	30,050	29,915	29,780	29,825	29,870	29,915	29,960	29,933	29,960	29,988	30,016	30,044	30,072	30,100	30,109	30,117	30,126	30,135	30,145	30,155		
Paper/Cardboard non packaging	31,692	31,696	31,190	30,980	30,772	30,565	30,359	30,108	29,972	29,837	29,702	29,568	29,435	29,302	29,170	29,039	29,083	29,109	29,135	29,161	29,188	29,215	29,242	29,269	29,296	29,324	29,351	29,359	29,368	29,376	29,385	29,395	29,404		
Skin and bones	209	209	206	204	203	201	200	198	198	197	196	195	194	193	192	191	192	192	192	192	192	193	193	193	193	193	193	193	193	193	193	193	193	193	
Wood	3,216	3,217	3,165	3,144	3,123	3,102	3,081	3,066	3,042	3,028	3,014	3,001	2,987	2,974	2,960	2,947	2,952	2,954	2,957	2,960	2,962	2,965	2,968	2,970	2,973	2,976	2,979	2,980	2,981	2,981	2,981	2,981	2,981		
Textile	12,573	12,575	12,374	12,291	12,208	12,126	12,044	11,961	11,879	11,837	11,784	11,731	11,678	11,625	11,573	11,521	11,538	11,548	11,559	11,569	11,580	11,590	11,601	11,612	11,623	11,634	11,645	11,648	11,651	11,655	11,658	11,662	11,666		
Glass	15,190	15,191	14,949	14,848	14,748	14,649	14,550	14,430	14,365	14,300	14,236	14,172	14,108	14,044	13,981	13,918	13,939	13,951	13,964	13,977	13,989	14,002	14,015	14,028	14,041	14,054	14,068	14,071	14,076	14,080	14,084	14,088	14,093		
Glass packaging	10,633	10,634	10,464	10,394	10,324	10,254	10,185	10,101	10,055	10,010	9,965	9,920	9,875	9,831	9,787	9,743	9,757	9,766	9,775	9,784	9,793	9,802	9,811	9,820	9,829	9,838	9,847	9,850	9,853	9,856	9,859	9,862	9,865		
Glass non packaging	4,557	4,557	4,485	4,454	4,425	4,395	4,365	4,329	4,309	4,290	4,271	4,251	4,232	4,213	4,194	4,175	4,182	4,185	4,189	4,193	4,197	4,201	4,205	4,208	4,212	4,216	4,220	4,221	4,222	4,224	4,225	4,227	4,228		
Metals	8,394	8,395	8,261	8,205	8,150	8,095	8,041	7,974	7,938	7,902	7,867	7,831	7,796	7,761	7,726	7,691	7,703	7,710	7,717	7,724	7,731	7,738	7,745	7,752	7,759	7,767	7,774	7,776	7,778	7,780	7,783	7,785	7,788		
Metals packaging	6,619	6,619	6,514	6,470	6,426	6,383	6,340	6,288	6,259	6,231	6,203	6,175	6,147	6,119	6,092	6,064	6,074	6,079	6,085	6,090	6,096	6,101	6,107	6,112	6,118	6,124	6,130	6,131	6,133	6,135	6,137	6,139	6,141		
Metals non packaging	1,775	1,775	1,747	1,735	1,724	1,712	1,701	1,687	1,679	1,671	1,664	1,656	1,649	1,641	1,634	1,627	1,629	1,631	1,632	1,634	1,635	1,637	1,638	1,640	1,641	1,643	1,644	1,645	1,645	1,646	1,647	1,647	1,647		
Inert	8,459	8,460	8,325	8,269	8,213	8,158	8,103	8,036	8,000	7,964	7,928	7,892	7,856	7,821	7,786	7,751	7,767	7,769	7,776	7,783	7,790	7,798	7,805	7,812	7,819	7,827	7,834	7,836	7,838	7,841	7,843	7,846	7,848		
Plastic	48,583	48,588	47,812	47,491	47,172	46,854	46,538	46,154	45,945	45,738	45,532	45,327	45,122	44,919	44,717	44,515	44,582	44,622	44,663	44,703	44,744	44,785	44,826	44,868	44,910	44,952	44,994	45,007	45,020	45,033	45,046	45,059	45,072		
Plastic packaging	33,036	33,040	32,512	32,294	32,077	31,861	31,646	31,384	31,243	31,102	30,962	30,822	30,683	30,545	30,407	30,270	30,316	30,343	30,371	30,398	30,426	30,454	30,482	30,510	30,539	30,567	30,596	30,605	30,613	30,622	30,631	30,641	30,651		
Plastic non packaging	15,547	15,548	15,300	15,197	15,095	14,993	14,892	14,769	14,703	14,636	14,570	14,505	14,439	14,374	14,309	14,245	14,266	14,279	14,292	14,305	14,318	14,331	14,344	14,358	14,371	14,385	14,398	14,402	14,406	14,410	14,415	14,419	14,424		
Rubber-Leather	4,741	4,742	4,666	4,635	4,603	4,572	4,542	4,504	4,484	4,464	4,443	4,423	4,403	4,384	4,364	4,344	4,351	4,355	4,359	4,363	4,366	4,370	4,375	4,379	4,383	4,387	4,391	4,392	4,393	4,395	4,396	4,397	4,399		
Special	2,172	2,172	2,138	2,123	2,109	2,095	2,081	2,064	2,054	2,045	2,036	2,027	2,017	2,008	1,999	1,990	1,993	1,995	1,997	1,999	2,001	2,002	2,004	2,006	2,008	2,010	2,012	2,013	2,013	2,013	2,013	2,013	2,015		
Diapers	8,751	8,752	8,612	8,555	8,497	8,440	8,383	8,314	8,276	8,239	8,202	8,165	8,128	8,091	8,055	8,019	8,031	8,038	8,045	8,052	8,060	8,067	8,075	8,082	8,090	8,097	8,105	8,107	8,109	8,112	8,114	8,117	8,119		
Bulky waste	14,504	14,506	14,274	14,178	14,083	13,988	13,894	13,799	13,717	13,655	13,593	13,532	13,471	13,410	13,350	13,290	13,310	13,322	13,334	13,346	13,358	13,370	13,383	13,395	13,407	13,420	13,433	13,436	13,440	13,444	13,448	13,452	13,457		
Total	246,396	246,423	242,489	240,860	239,240	237,629	236,027	234,076	233,020	231,969	230,923	229,882	228,846	227,815	226,788	225,767	225,107	226,310	226,514	226,720	226,927	227,135	227,345	227,556	227,768	227,981	228,196	228,259	228,324	228,391	228,461	228,532	228,606	228,384	
Remaining MUNICIPAL WASTE (after sorting at source) (t)	205,303	203,919	196,874	190,613	182,270	166,495	137,617	91,447	91,034	90,624	90,215	89,809	89,404	89,001	88,600	88,201	88,334	88,413	88,493	88,573	88,654	88,735	88,817	88,900	88,983	89,066	89,150	89,174	89,200	89,226	89,253	89,281	89,310	89,138	
Analysis per material (t)																																			
Kitchen and biowaste									31,441	31,300	31,158	31,018	30,878	30,739	30,601	30,463	30,509	30,536	30,564	30,591	30,619	30,647	30,676	30,704	30,733	30,762	30,791	30,799	30,808	30,817	30,826	30,836	30,846		
Paper/Cardboard									10,623	10,575	10,528	10,480	10,433	10,386	10,339	10,293	10,308	10,317	10,327	10,336	10,345	10,355	10,364	10,374	10,384	10,393	10,403	10,406	10,409	10,412	10,415	10,419	10,422		
Paper/Cardboard packaging									5,379	5,355	5,331	5,307	5,283	5,259	5,235	5,212	5,220	5,225	5,229	5,234	5,239	5,244	5,248	5,253	5,258	5,263	5,268	5,271	5,273	5,274	5,276	5,278			
Paper/Cardboard non packaging									5,244	5,220	5,197	5,173	5,150	5,127	5,103	5,080	5,088	5,093	5,097	5,102	5,107	5,111	5,116	5,121	5,126	5,130	5,135	5,137	5,138	5,140	5,141	5,143	5,144		
Skin and bones									198	197	196	195	194	193	192	191	192	192	192	192	192	193	193	193	193	193	193	193	193	193	193	193	193	193	
Wood									3,042	3,028	3,014	3,001	2,987	2,974	2,960	2,947	2,952	2,954	2,957	2,960	2,962	2,965	2,968	2,970	2,973	2,976	2,979	2,980	2,981	2,981	2,981	2,981	2,981		
Textile									11,891	11,837	11,784	11,731	11,678	11,625	11,573	11,521	11,538	11,548	11,559	11,569	11,580	11,590	11,601	11,612	11,623	11,634	11,645	11,648	11,651	11,655	11,658	11,662	11,666		
Glass									2,514	2,503	2,491	2,480	2,469	2,458	2,447	2,436	2,439	2,442	2,444	2,446	2,448	2,451	2,453	2,455	2,457	2,460	2,462	2,463	2,464	2,465	2,466	2,466			
Glass packaging									1,760	1,752	1,744	1,736	1,728	1,721	1,713	1,705	1,708	1,709	1,711	1,712	1,714	1,716	1,717	1,719	1,720	1,722	1,724	1,724	1,725	1,726	1,				



MRF Facility assumptions	Recovery %
Paper	
<i>Paper Packaging</i>	80%
<i>Paper non packaging</i>	80%
Plastic	
<i>Plastic packaging</i>	80%
<i>Plastic non packaging</i>	80%
Glass	
<i>Glass packaging</i>	80%
<i>Glass non packaging</i>	80%
Metal	
<i>Metal packaging</i>	80%
<i>Metal non packaging</i>	80%

MRF output (Recovered RECYCLABLES)

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Paper	40,068	39,888	39,708	39,529	39,351	39,173	38,997	38,821	38,880	38,914	38,950	38,985	39,021	39,056	39,092	39,129	39,165	39,202	39,239	39,250	39,261	39,272	39,284	39,297	39,309
<i>Paper Packaging</i>	20,286	20,194	20,103	20,013	19,922	19,833	19,743	19,654	19,684	19,702	19,719	19,737	19,755	19,773	19,792	19,810	19,829	19,847	19,866	19,871	19,877	19,883	19,889	19,895	19,902
<i>Paper non packaging</i>	19,782	19,693	19,604	19,516	19,428	19,341	19,253	19,167	19,196	19,213	19,230	19,248	19,265	19,283	19,301	19,319	19,337	19,355	19,373	19,378	19,384	19,390	19,395	19,401	19,408
Plastic	30,325	30,189	30,052	29,917	29,782	29,648	29,514	29,381	29,426	29,452	29,479	29,505	29,532	29,560	29,587	29,614	29,642	29,670	29,698	29,706	29,714	29,723	29,732	29,741	29,751
<i>Plastic packaging</i>	20,621	20,528	20,436	20,344	20,252	20,161	20,070	19,979	20,010	20,028	20,046	20,064	20,082	20,101	20,119	20,138	20,157	20,175	20,194	20,200	20,206	20,212	20,218	20,224	20,231
<i>Plastic non packaging</i>	9,704	9,660	9,617	9,573	9,530	9,487	9,445	9,402	9,416	9,425	9,433	9,442	9,450	9,459	9,468	9,477	9,485	9,494	9,503	9,506	9,509	9,511	9,514	9,517	9,520
Glass	9,481	9,438	9,395	9,353	9,311	9,269	9,227	9,186	9,199	9,208	9,216	9,224	9,233	9,241	9,250	9,258	9,267	9,276	9,284	9,287	9,290	9,292	9,295	9,298	9,301
<i>Glass packaging</i>	6,636	6,606	6,577	6,547	6,518	6,488	6,459	6,430	6,440	6,445	6,451	6,457	6,463	6,469	6,475	6,481	6,487	6,493	6,499	6,501	6,503	6,505	6,507	6,509	6,511
<i>Glass non packaging</i>	2,844	2,832	2,819	2,806	2,793	2,781	2,768	2,756	2,760	2,762	2,765	2,767	2,770	2,773	2,775	2,778	2,780	2,783	2,785	2,786	2,787	2,788	2,789	2,790	2,790
Metal	5,239	5,215	5,192	5,168	5,145	5,122	5,099	5,076	5,084	5,088	5,093	5,097	5,102	5,107	5,111	5,116	5,121	5,126	5,131	5,132	5,133	5,135	5,136	5,138	5,140
<i>Metal packaging</i>	4,131	4,112	4,094	4,075	4,057	4,039	4,020	4,002	4,008	4,012	4,016	4,019	4,023	4,027	4,030	4,034	4,038	4,042	4,045	4,047	4,048	4,049	4,050	4,051	4,053
<i>Metal non packaging</i>	1,108	1,103	1,098	1,093	1,088	1,083	1,078	1,074	1,075	1,076	1,077	1,078	1,079	1,080	1,081	1,082	1,083	1,084	1,085	1,085	1,086	1,086	1,086	1,087	1,087
Total Recyclables	85,113	84,729	84,347	83,967	83,589	83,212	82,837	82,464	82,588	82,662	82,737	82,812	82,888	82,964	83,040	83,117	83,195	83,273	83,351	83,374	83,398	83,423	83,448	83,474	83,501
Total Packaging	51,674	51,441	51,209	50,979	50,749	50,520	50,293	50,066	50,141	50,186	50,232	50,277	50,323	50,369	50,416	50,463	50,510	50,557	50,605	50,619	50,633	50,648	50,663	50,679	50,696



MRF output (Residues)

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Paper	5,009	4,986	4,963	4,941	4,919	4,897	4,875	4,853	4,860	4,864	4,869	4,873	4,878	4,882	4,887	4,891	4,896	4,900	4,905	4,906	4,908	4,909	4,911	4,912	4,914
<i>Paper Packaging</i>	2,536	2,524	2,513	2,502	2,490	2,479	2,468	2,457	2,461	2,463	2,465	2,467	2,470	2,472	2,474	2,476	2,479	2,481	2,483	2,484	2,485	2,485	2,486	2,487	2,488
<i>Paper non packaging</i>	2,473	2,462	2,450	2,439	2,428	2,417	2,407	2,396	2,399	2,402	2,404	2,406	2,408	2,410	2,412	2,415	2,417	2,419	2,422	2,422	2,423	2,424	2,424	2,425	2,426
Plastic	3,791	3,773	3,756	3,740	3,723	3,706	3,689	3,673	3,678	3,681	3,685	3,688	3,691	3,695	3,698	3,702	3,705	3,709	3,712	3,713	3,714	3,715	3,716	3,718	3,719
<i>Plastic packaging</i>	2,578	2,566	2,554	2,543	2,531	2,520	2,509	2,497	2,501	2,503	2,506	2,508	2,510	2,512	2,515	2,517	2,519	2,522	2,524	2,525	2,526	2,526	2,527	2,528	2,529
<i>Plastic non packaging</i>	1,213	1,208	1,202	1,197	1,191	1,186	1,181	1,175	1,177	1,178	1,179	1,180	1,181	1,182	1,183	1,185	1,186	1,187	1,188	1,188	1,189	1,189	1,189	1,190	1,190
Glass	1,185	1,180	1,174	1,169	1,164	1,159	1,153	1,148	1,150	1,151	1,152	1,153	1,154	1,155	1,156	1,157	1,158	1,160	1,161	1,161	1,161	1,162	1,162	1,162	1,163
<i>Glass packaging</i>	830	826	822	818	815	811	807	804	805	806	806	807	808	809	809	810	811	812	812	813	813	813	813	814	814
<i>Glass non packaging</i>	356	354	352	351	349	348	346	344	345	345	346	346	346	347	347	347	348	348	348	348	348	348	349	349	349
Metal	655	652	649	646	643	640	637	635	635	636	637	637	638	638	639	640	640	641	641	642	642	642	642	642	643
<i>Metal packaging</i>	516	514	512	509	507	505	503	500	501	502	502	502	503	503	504	504	505	505	506	506	506	506	506	506	507
<i>Metal non packaging</i>	139	138	137	137	136	135	135	134	134	135	135	135	135	135	135	135	135	136	136	136	136	136	136	136	136
Total Recyclables rejected (bad quality)	10639	10591	10543	10496	10449	10402	10355	10308	10324	10333	10342	10352	10361	10370	10380	10390	10399	10409	10419	10422	10425	10428	10431	10434	10438
Other fractions rejected	10639	10591	10543	10496	10449	10402	10355	10308	10324	10333	10342	10352	10361	10370	10380	10390	10399	10409	10419	10422	10425	10428	10431	10434	10438
Total Residues	21278	21182	21087	20992	20897	20803	20709	20616	20647	20666	20684	20703	20722	20741	20760	20779	20799	20818	20838	20844	20850	20856	20862	20869	20875
MRF Input	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Paper	50,085	49,859	49,635	49,411	49,188	48,966	48,746	48,526	48,599	48,643	48,687	48,731	48,776	48,820	48,865	48,911	48,956	49,002	49,048	49,062	49,076	49,090	49,105	49,121	49,137
<i>Paper Packaging</i>	25,357	25,243	25,129	25,016	24,903	24,791	24,679	24,568	24,605	24,627	24,649	24,672	24,694	24,717	24,740	24,763	24,786	24,809	24,832	24,839	24,846	24,854	24,861	24,869	24,877
<i>Paper non packaging</i>	24,728	24,617	24,506	24,395	24,285	24,176	24,067	23,958	23,994	24,016	24,038	24,060	24,081	24,104	24,126	24,148	24,171	24,193	24,216	24,223	24,230	24,237	24,244	24,252	24,260
Plastic	37,907	37,736	37,566	37,396	37,228	37,060	36,893	36,727	36,782	36,815	36,848	36,882	36,916	36,949	36,984	37,018	37,052	37,087	37,122	37,132	37,143	37,154	37,165	37,177	37,189
<i>Plastic packaging</i>	25,777	25,660	25,545	25,430	25,315	25,201	25,087	24,974	25,012	25,034	25,057	25,080	25,103	25,126	25,149	25,172	25,196	25,219	25,243	25,250	25,257	25,265	25,272	25,280	25,288
<i>Plastic non packaging</i>	12,130	12,075	12,021	11,967	11,913	11,859	11,806	11,753	11,770	11,781	11,791	11,802	11,813	11,824	11,835	11,846	11,857	11,868	11,879	11,882	11,886	11,889	11,893	11,896	11,900
Glass	11,851	11,797	11,744	11,691	11,639	11,586	11,534	11,482	11,499	11,510	11,520	11,531	11,541	11,552	11,562	11,573	11,584	11,595	11,606	11,609	11,612	11,616	11,619	11,623	11,626
<i>Glass packaging</i>	8,296	8,258	8,221	8,184	8,147	8,110	8,074	8,037	8,049	8,057	8,064	8,071	8,079	8,086	8,093	8,101	8,109	8,116	8,124	8,126	8,128	8,131	8,133	8,136	8,138
<i>Glass non packaging</i>	3,555	3,539	3,523	3,508	3,492	3,476	3,460	3,445	3,450	3,453	3,456	3,459	3,462	3,466	3,469	3,472	3,475	3,479	3,482	3,483	3,484	3,485	3,486	3,487	3,488
Metal	6,549	6,519	6,490	6,461	6,431	6,402	6,374	6,345	6,354	6,360	6,366	6,372	6,378	6,383	6,389	6,395	6,401	6,407	6,413	6,415	6,417	6,419	6,421	6,423	6,425
<i>Metal packaging</i>	5,164	5,140	5,117	5,094	5,071	5,048	5,026	5,003	5,010	5,015	5,020	5,024	5,029	5,033	5,038	5,043	5,047	5,052	5,057	5,058	5,060	5,061	5,063	5,064	5,066
<i>Metal non packaging</i>	1,385	1,379	1,373	1,366	1,360	1,354	1,348	1,342	1,344	1,345	1,346	1,348	1,349	1,350	1,351	1,353	1,354	1,355	1,356	1,357	1,357	1,358	1,358	1,358	1,359
Total Recyclables	106,392	105,912	105,434	104,959	104,486	104,015	103,547	103,080	103,235	103,328	103,421	103,515	103,610	103,705	103,801	103,897	103,994	104,091	104,189	104,218	104,248	104,278	104,310	104,343	104,377
Other fractions rejected	10639	10591	10543	10496	10449	10402	10355	10308	10324	10333	10342	10352	10361	10370	10380	10390	10399	10409	10419	10422	10425	10428	10431	10434	10438
Total MRF Input	106,392	105,912	105,434	104,959	104,486	104,015	103,547	103,080	103,235	103,328	103,421	103,515	103,610	103,705	103,801	103,897	103,994	104,091	104,189	104,218	104,248	104,278	104,310	104,343	104,377