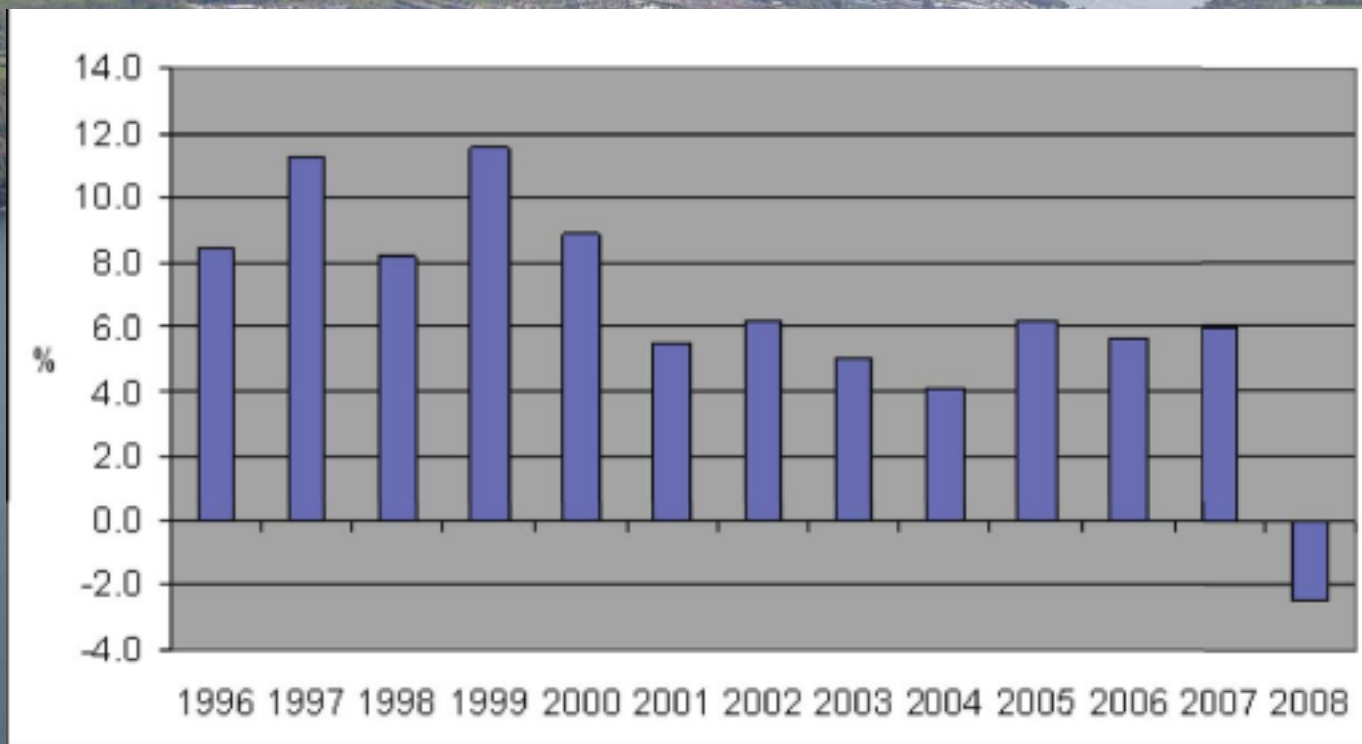


Waste generated per capita by country in 2006 (OECD, 2009)

(Figure 1)



Irish GDP, 1996 - 2008 (ESRI, 2008)

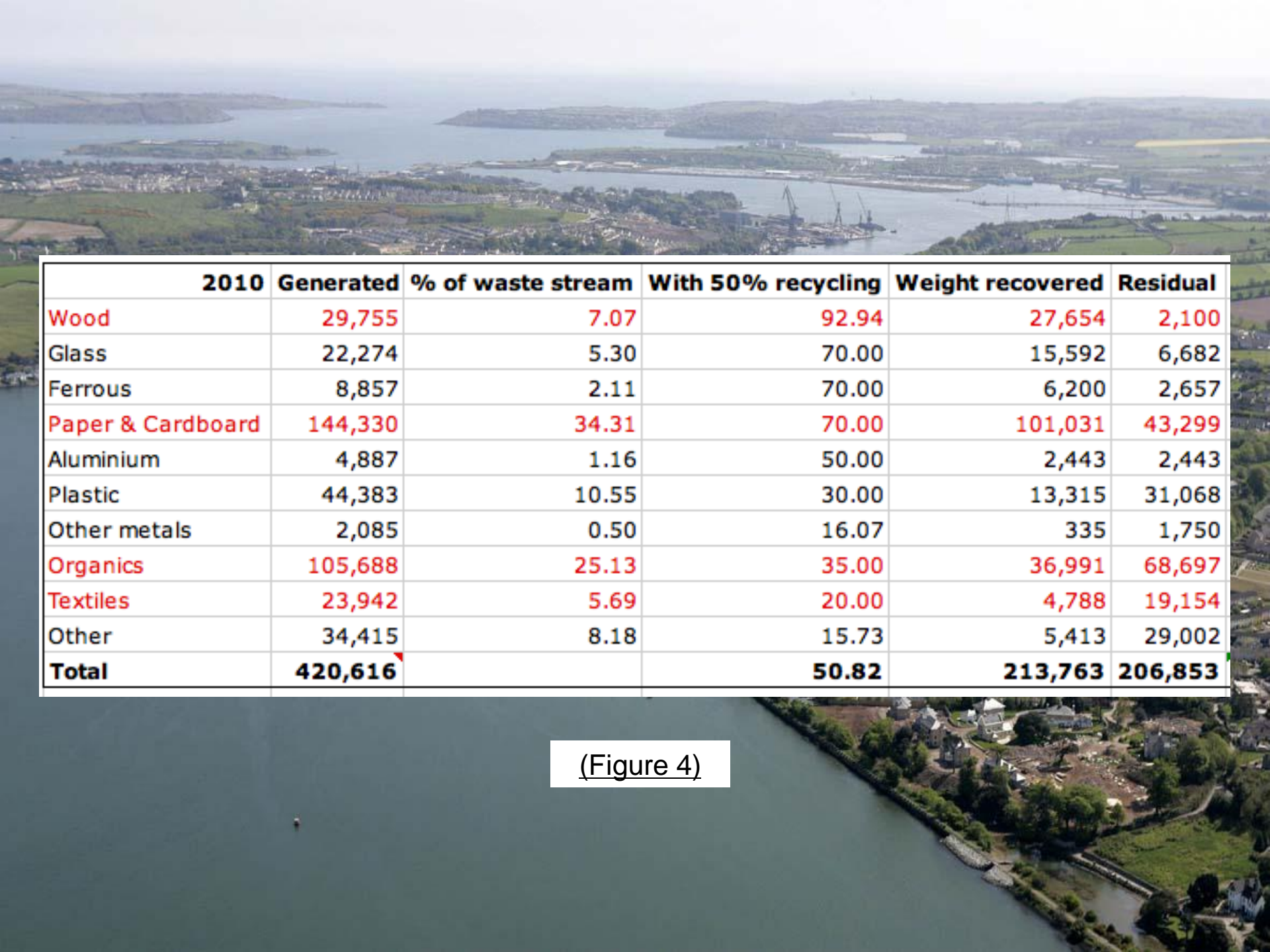
(Figure 2)

Table 3 Disposal and recovery of municipal waste, 2006

Material	Quantity managed (tonnes)	Quantity landfilled (tonnes)	National landfill rate (%)	Quantity recovered (tonnes)	National recovery rate (%)
Wood	219,317	15,480	7.1	203,837	92.9
Glass	164,181	59,873	36.5	104,308	63.5
Ferrous	65,285	26,697	40.9	38,588	59.1
Paper and cardboard	1,063,841	475,285	44.7	588,556	55.3
Aluminium	36,020	22,707	63.0	13,313	37.0
Plastic	327,141	263,615	80.6	63,526	19.4
Other metals	15,365	12,896	83.9	2,469	16.1
Organics	779,015	723,671	92.9	55,345	7.1
Textiles	176,474	166,623	94.4	9,851	5.6
Other ¹⁰	253,672	213,773	84.3	39,899	15.7
Total	3,100,310	1,980,618	63.9	¹¹ 1,119,692	36.1

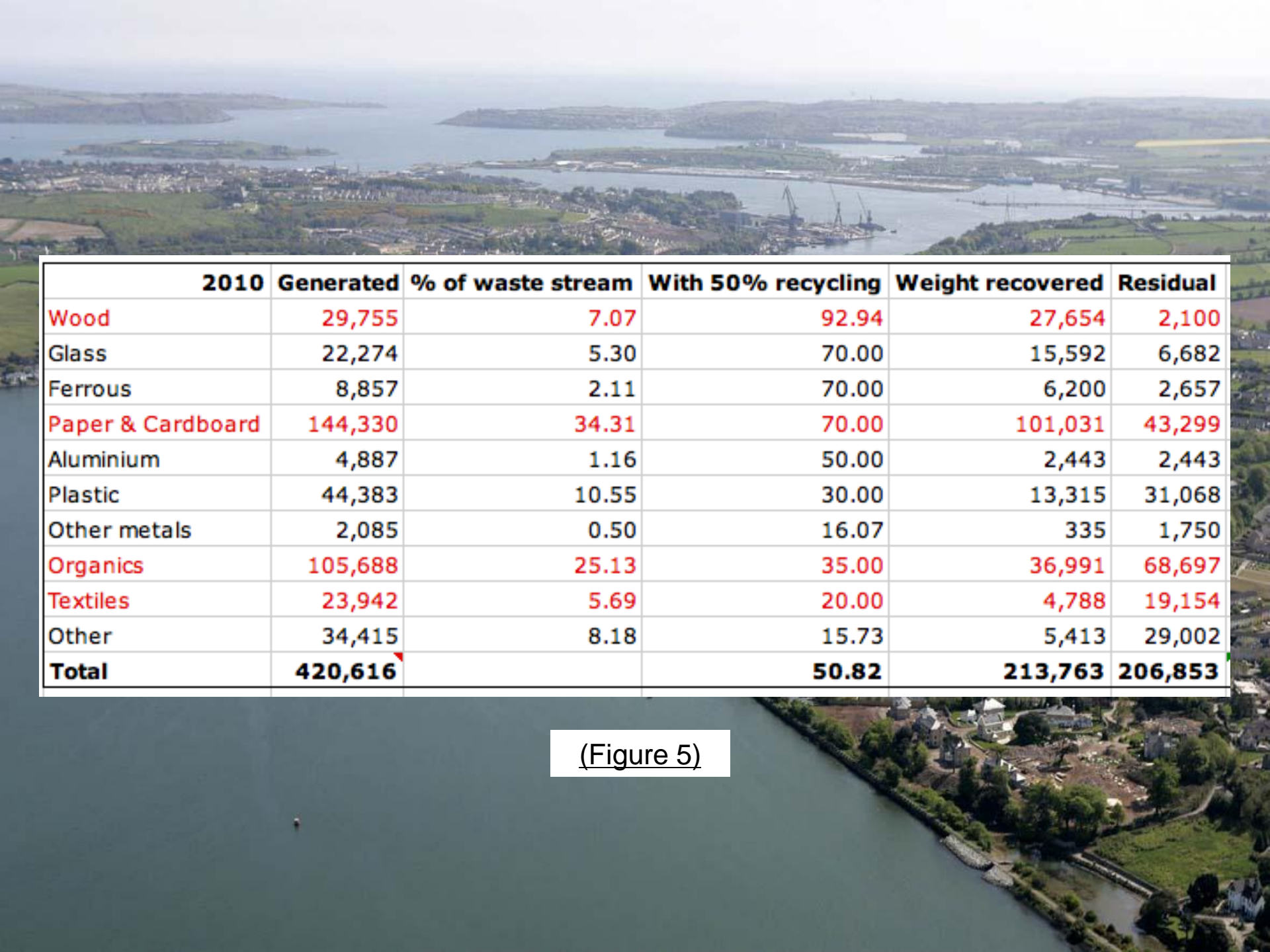
(Source: recycling organisations survey, local authority survey, landfill annual environmental reports and EPA municipal waste composition survey)

(Figure 3)




	2010	Generated	% of waste stream	With 50% recycling	Weight recovered	Residual
Wood		29,755	7.07	92.94	27,654	2,100
Glass		22,274	5.30	70.00	15,592	6,682
Ferrous		8,857	2.11	70.00	6,200	2,657
Paper & Cardboard		144,330	34.31	70.00	101,031	43,299
Aluminium		4,887	1.16	50.00	2,443	2,443
Plastic		44,383	10.55	30.00	13,315	31,068
Other metals		2,085	0.50	16.07	335	1,750
Organics		105,688	25.13	35.00	36,991	68,697
Textiles		23,942	5.69	20.00	4,788	19,154
Other		34,415	8.18	15.73	5,413	29,002
Total		420,616		50.82	213,763	206,853

(Figure 4)




	2010	Generated	% of waste stream	With 50% recycling	Weight recovered	Residual
Wood		29,755	7.07	92.94	27,654	2,100
Glass		22,274	5.30	70.00	15,592	6,682
Ferrous		8,857	2.11	70.00	6,200	2,657
Paper & Cardboard		144,330	34.31	70.00	101,031	43,299
Aluminium		4,887	1.16	50.00	2,443	2,443
Plastic		44,383	10.55	30.00	13,315	31,068
Other metals		2,085	0.50	16.07	335	1,750
Organics		105,688	25.13	35.00	36,991	68,697
Textiles		23,942	5.69	20.00	4,788	19,154
Other		34,415	8.18	15.73	5,413	29,002
Total		420,616		50.82	213,763	206,853

(Figure 5)

An aerial photograph of a coastal town and harbor. The town is built on a peninsula and is surrounded by green fields and trees. The harbor is filled with water and has several boats. In the background, there are hills and a large body of water. A data table is overlaid on the image, showing MSW generated, Residual, and Residual (EIS) for the years 2010, 2013, and 2016.

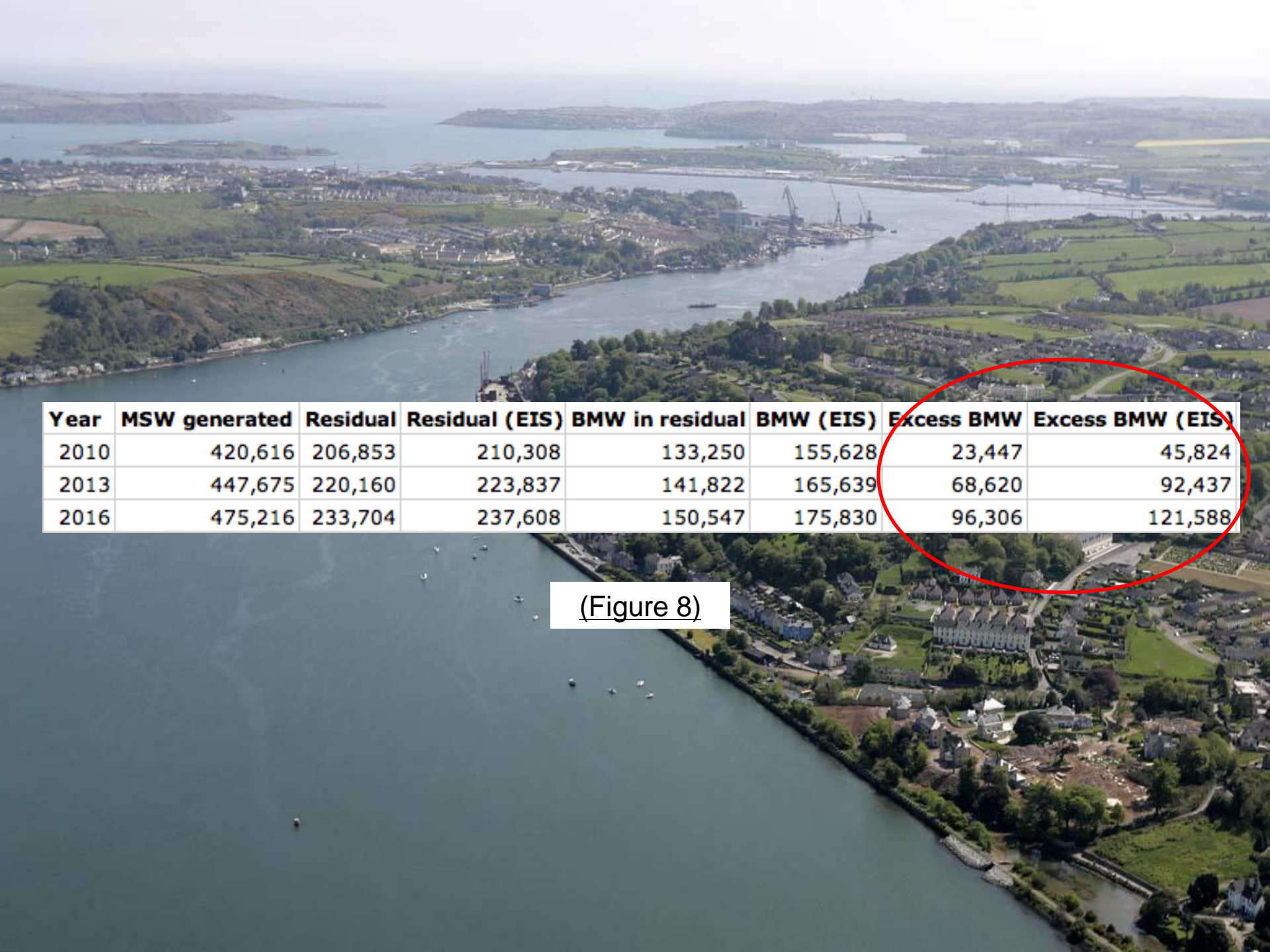
Year	MSW generated	Residual	Residual (EIS)
2010	420,616	206,853	210,308
2013	447,675	220,160	223,837
2016	475,216	233,704	237,608

(Figure 6)



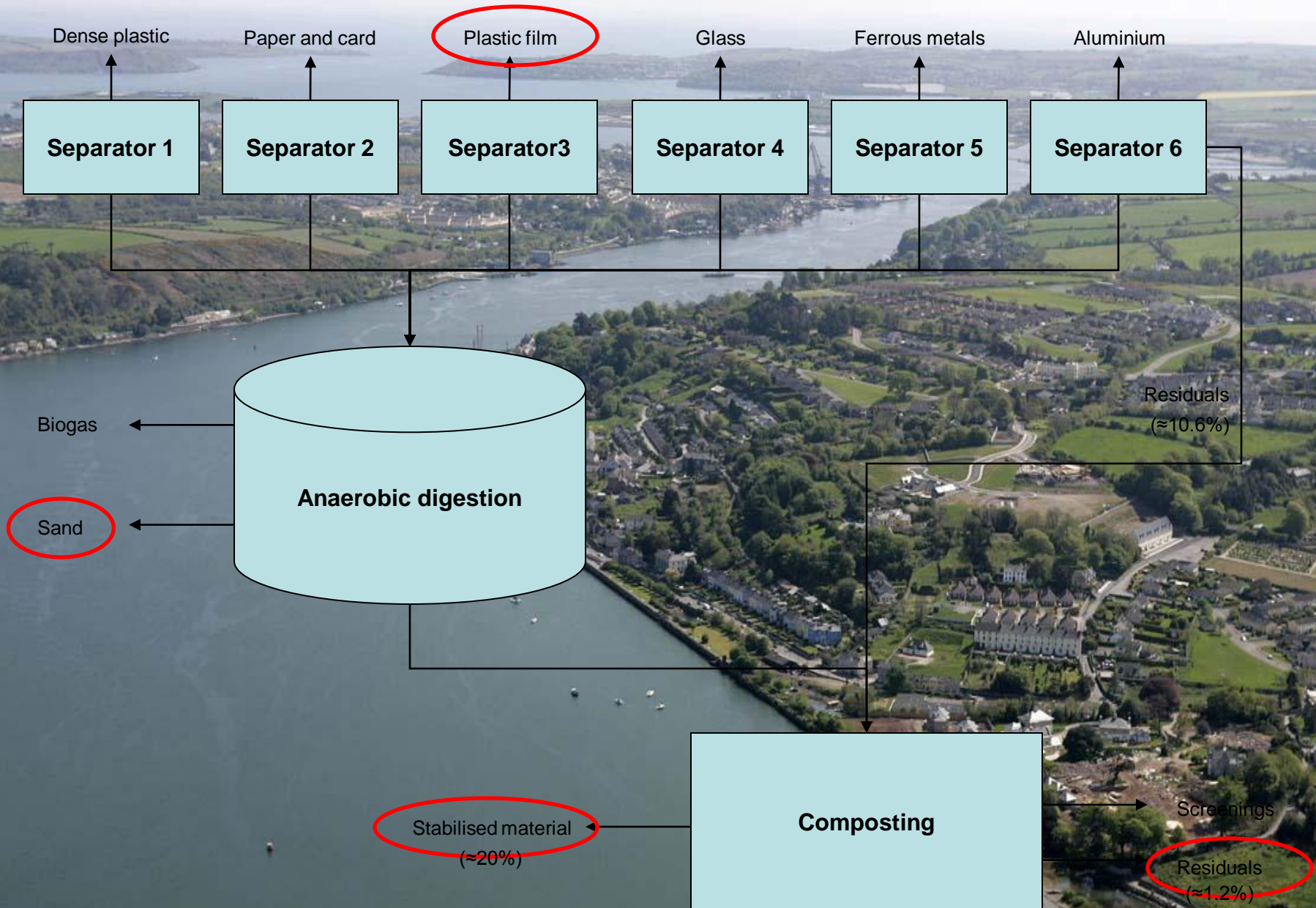
	2010	Generated	% of waste	With 50% recycling	Weight recovered	Residual	Total BMW	%BMW
Wood		29,755	7.07	92.94	27,654	2,100	2,100	
Glass		22,274	5.30	70.00	15,592	6,682		
Ferrous		8,857	2.11	70.00	6,200	2,657		
Paper & Cardboard		144,330	34.31	70.00	101,031	43,299	43,299	
Aluminium		4,887	1.16	50.00	2,443	2,443		
Plastic		44,383	10.55	30.00	13,315	31,068		
Other metals		2,085	0.50	16.07	335	1,750		
Organics		105,688	25.13	35.00	36,991	68,697	68,697	
Textiles		23,942	5.69	20.00	4,788	19,154	19,154	
Other		34,415	8.18	15.73	5,413	29,002		
Total		420,616		50.82	213,763	206,853	133,250	64.42

(Figure 7)



Year	MSW generated	Residual	Residual (EIS)	BMW in residual	BMW (EIS)	Excess BMW	Excess BMW (EIS)
2010	420,616	206,853	210,308	133,250	155,628	23,447	45,824
2013	447,675	220,160	223,837	141,822	165,639	68,620	92,437
2016	475,216	233,704	237,608	150,547	175,830	96,306	121,588

(Figure 8)



(Figure 9)



Year	MSW generated	Residual	Residual (EIS)	After MBT	After MBT (EIS)	BMW 50%	Excess BMW
2010	420,616	206,853	210,308	60,358	126,184	30,179	-79,624
2013	447,675	220,160	223,837	64,241	134,302	32,121	-41,081
2016	475,216	233,704	237,608	68,193	142,564	34,097	-20,144

(Figure 10)



(Figure 11)

	2013	Generated	% of waste stream	With 60% recycling	Weight recovered	Residual	Total BMW	%BMW
Wood		31,669	7.07	92.94	29,433	2,235	2,235	
Glass		23,707	5.30	80.00	18,966	4,741		
Ferrous		9,427	2.11	70.00	6,599	2,828		
Paper & Cardboard		153,615	34.31	80.00	122,892	30,723	30,723	
Aluminium		5,201	1.16	60.00	3,121	2,080		
Plastic		47,238	10.55	40.00	18,895	28,343		
Other metals		2,219	0.50	30.00	666	1,553		
Organics		112,487	25.13	50.00	56,244	56,244	56,244	
Textiles		25,482	5.69	30.00	7,645	17,838	17,838	
Other		36,629	8.18	18.00	6,593	30,036		
Total		447,675		60.55	271,053	176,622	107,040	60.60

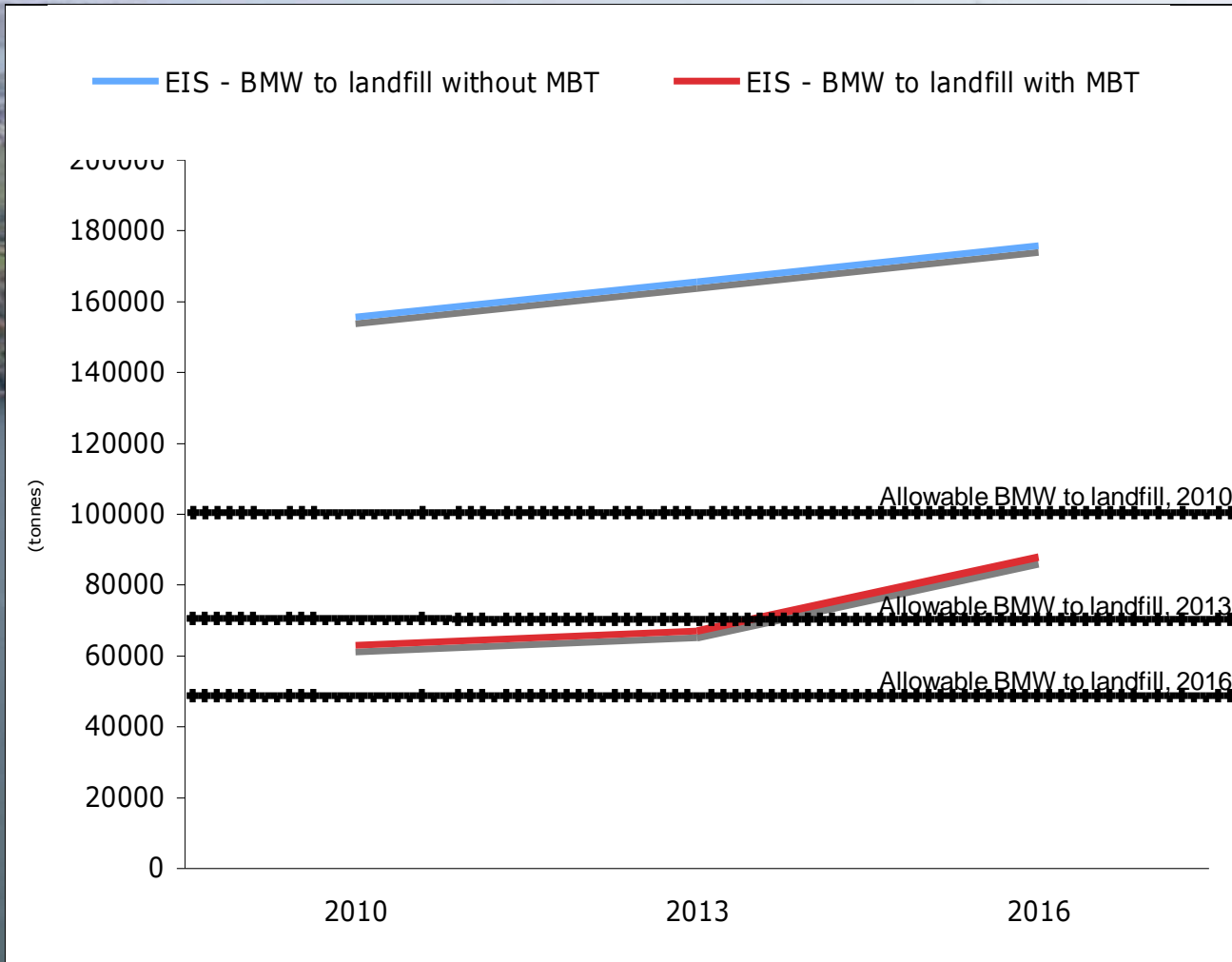
	2016	Generated	% of waste stream	With 70% recycling	Weight recovered	Residual	Total BMW	%BMW
Wood		31,669	7.07	95.00	30,085	1,583	1,583	
Glass		23,707	5.30	85.00	20,151	3,556		
Ferrous		9,427	2.11	75.00	7,070	2,357		
Paper & Cardboard		153,615	34.31	90.00	138,254	15,362	15,362	
Aluminium		5,201	1.16	70.00	3,641	1,560		
Plastic		47,238	10.55	45.00	21,257	25,981		
Other metals		2,219	0.50	40.00	887	1,331		
Organics		112,487	25.13	65.00	73,117	39,371	39,371	
Textiles		25,482	5.69	50.00	12,741	12,741	12,741	
Other		36,629	8.18	20.00	7,326	29,304		
Total		447,675		70.26	314,529	133,146	69,057	51.87

(Figure 12)

Year	MSW generated	Residue	BMW content	Allowable BMW
2010 - 50% recycling	420,616	206,853	133,250	109,803
2013 - 60% recycling	447,675	176,622	107,040	73,202
2016 - 70% recycling	475,216	133,146	69,057	54,241

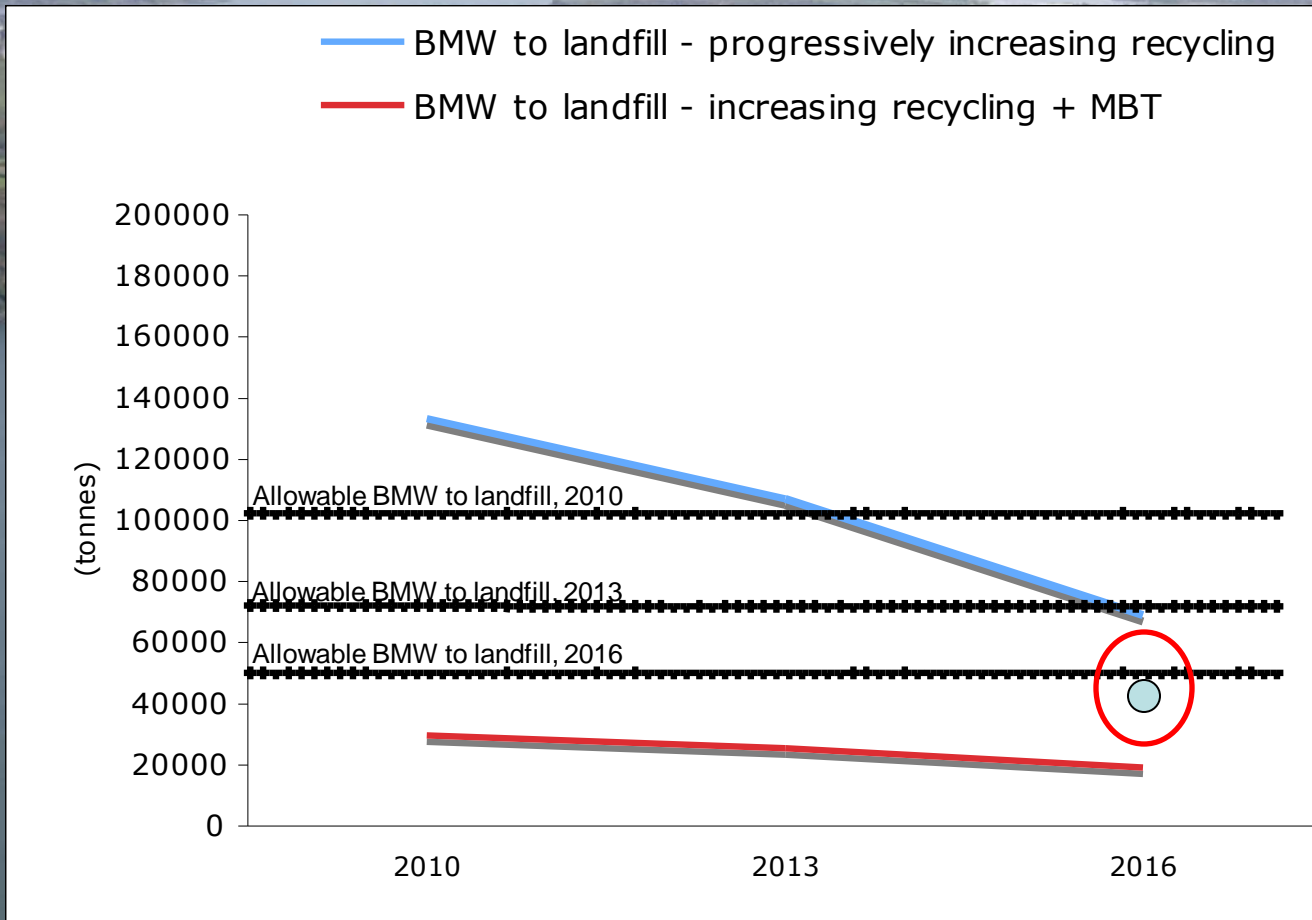
<u>After MBT:</u>				
Year	MSW generated	Residue	Residue after MBT	
2010 - 50% recycling	420,616	206,853	59,367	
2013 - 60% recycling	447,675	176,622	50,691	
2016 - 70% recycling	475,216	133,146	38,213	

(Figure 13)



BMW to landfill as predicted by EIS

(Figure 14)



BMW to landfill with increasing recycling and 3-stage MBT

(Figure 15)



QuickTime™ and a decompressor are needed to see this picture.

(Figure 16)