Bedford County Waste Composition Tables

Statewide Waste Composition Study

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on Statewide Waste Composition Study

		Material Categories	Tons Disposed	Mean Composition
Paper			**13,340**	**28.1%**
	1	Corrugated Cardboard	3,845	8.1%
	2	Newspaper	332	0.7%
	3	Office/High Grade Paper	237	0.5%
	4	Magazines/Catalogs	332	0.7%
	5	Aseptic Boxes and Gable Top Cartons	237	0.5%
	6	Mixed Recyclables	2,753	5.8%
	7	Compostable Paper	3,418	7.2%
	8	Non-recyclable Paper	2,184	4.6%
Plastic			**10,301**	**21.7%**
	1	#1 PET Bottles and Jars	665	1.4%
	2	#1 PET Non-Bottles & Containers	142	0.3%
	3	#2 HDPE Natural Bottles	190	0.4%
	4	#2 HDPE Colored Bottles	142	0.3%
	5	#3-#7 Bottles	47	0.1%
	6	#2-#7 Non-Bottle Rigid Containers	617	1.3%
	7	Expanded Polystyrene	617	1.3%
	8	Clean Retail Plastic Bags	47	0.1%
	9	Industrial Film	1,851	3.9%
	10	All Other Film	3,086	6.5%
	11	Durable/Bulky Rigid Plastics	1,329	2.8%
	12	Remainder/Compostable Plastics	1,567	3.3%
Glass			**1,139**	**2.4%**
	1	Clear Glass	427	0.9%
	2	Green Glass	142	0.3%
	3	Brown Glass	190	0.4%
	4	Non-recyclable Glass	380	0.8%
Metals			**1,424**	**3.0%**
	1	Steel Cans	427	0.9%
	2	Aluminum Cans	237	0.5%
	3	Other Aluminum	142	0.3%
	4	Other Ferrous Metals	427	0.9%
	5	Other Non-Ferrous	190	0.4%
Organics			**17,185**	**36.2%**
	1	Food Waste	7,073	14.9%
	2	Yard Waste - Grass	380	0.8%
	3	Yard Waste - Other	1,044	2.2%
	4	Wood - Unpainted	1,756	3.7%
	5	Wood - Painted	1,092	2.3%
	6	Textiles and Leather Products	1,282	2.7%
	7	Diapers and Sanitary Products	1,519	3.2%
	8	Animal By-Products	1,377	2.9%
	9	Fines	380	0.8%
	10	Other organics	1,282	2.7%
Inorganics			**4,083**	**8.6%**
	1	Electronics - Covered Devices	0	0.0%
	2	Other Electronics	190	0.4%
	3	Carpet and Carpet Padding	380	0.8%
	4	Drywall/Gypsum Board	190	0.4%
	5	Concrete,Rock and Brick	47	0.1%
	6	Asphalt Roofing	0	0.0%
	7	Asphalt Paving	0	0.0%
	8	Other C&D	522	1.1%
	9	Medically-Related Wastes	95	0.2%
	10	Lithium Batteries	0	0.0%
	11	Automotive Batteries	47	0.0%
	12	Other Batteries	47	0.1%
	13	Other HHW	617	0.1%
	14	Bulky Materials	1,472	1.3%
	15	Furniture	380	3.1%
	16	Other Organics	95	0.8%
	17	PPE	95	0.2%
		Total	**47,472**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on Statewide Waste Composition Study

		Material Categories	Tons Disposed	Mean Composition
Paper			**10,592**	**28.1%**
	1	Corrugated Cardboard	3,053	8.1%
	2	Newspaper	264	0.7%
	3	Office/High Grade Paper	188	0.5%
	4	Magazines/Catalogs	264	0.7%
	5	Aseptic Boxes and Gable Top Cartons	188	0.5%
	6	Mixed Recyclables	2,186	5.8%
	7	Compostable Paper	2,714	7.2%
	8	Non-recyclable Paper	1,734	4.6%
Plastic			**8,180**	**21.7%**
	1	#1 PET Bottles and Jars	528	1.4%
	2	#1 PET Non-Bottles & Containers	113	0.3%
	3	#2 HDPE Natural Bottles	151	0.4%
	4	#2 HDPE Colored Bottles	113	0.3%
	5	#3-#7 Bottles	38	0.1%
	6	#2-#7 Non-Bottle Rigid Containers	490	1.3%
	7	Expanded Polystyrene	490	1.3%
	8	Clean Retail Plastic Bags	38	0.1%
	9	Industrial Film	1,470	3.9%
	10	All Other Film	2,450	6.5%
	11	Durable/Bulky Rigid Plastics	1,055	2.8%
	12	Remainder/Compostable Plastics	1,244	3.3%
Glass			**905**	**2.4%**
	1	Clear Glass	339	0.9%
	2	Green Glass	113	0.3%
	3	Brown Glass	151	0.4%
	4	Non-recyclable Glass	302	0.8%
Metals			**1,131**	**3.0%**
	1	Steel Cans	339	0.9%
	2	Aluminum Cans	188	0.5%
	3	Other Aluminum	113	0.3%
	4	Other Ferrous Metals	339	0.9%
	5	Other Non-Ferrous	151	0.4%
Organics			**13,645**	**36.2%**
	1	Food Waste	5,616	14.9%
	2	Yard Waste - Grass	302	0.8%
	3	Yard Waste - Other	829	2.2%
	4	Wood - Unpainted	1,395	3.7%
	5	Wood - Painted	867	2.3%
	6	Textiles and Leather Products	1,018	2.7%
	7	Diapers and Sanitary Products	1,206	3.2%
	8	Animal By-Products	1,093	2.9%
	9	Fines	302	0.8%
	10	Other organics	1,018	2.7%
Inorganics			**3,242**	**8.6%**
	1	Electronics - Covered Devices	0	0.0%
	2	Other Electronics	151	0.4%
	3	Carpet and Carpet Padding	302	0.8%
	4	Drywall/Gypsum Board	151	0.4%
	5	Concrete,Rock and Brick	38	0.1%
	6	Asphalt Roofing	0	0.0%
	7	Asphalt Paving	0	0.0%
	8	Other C&D	415	1.1%
	9	Medically-Related Wastes	75	0.2%
	10	Lithium Batteries	0	0.0%
	11	Automotive Batteries	38	0.0%
	12	Other Batteries	38	0.1%
	13	Other HHW	490	0.1%
	14	Bulky Materials	1,169	1.3%
	15	Furniture	302	3.1%
	16	Other Organics	75	0.8%
	17	PPE	75	0.2%
		Total	**37,694**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

National Waste Composition Study

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on EPA National Study

	Material Categories	Tons Disposed	Mean Composition
Paper		**6,646**	**14.0%**
Plastic		**9,020**	**19.0%**
Glass		**2,374**	**5.0%**
Metals		**4,272**	**9.0%**
Organics		**23,261**	**49.0%**
	Yard Trimmings	3,798	8.0%
	Wood	3,798	8.0%
	Food Waste	10,444	22.0%
	Rubber,leather and textiles	5,222	11.0%
Inorganics		**1,899**	**4.0%**
	Total	**47,472**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Most recent EPA National Study was conducted in 2018.

Adjusted Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on EPA National Study

	Material Categories	Tons Disposed	Mean Composition
Paper		**5,277**	**14.0%**
Plastic		**7,162**	**19.0%**
Glass		**1,885**	**5.0%**
Metals		**3,392**	**9.0%**
Organics		**18,470**	**49.0%**
	Yard Trimmings	3,016	8.0%
	Wood	3,016	8.0%
	Food Waste	8,293	22.0%
	Rubber,leather and textiles	4,146	11.0%
Inorganics		**1,508**	**4.0%**
	Total	**37,694**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Most recent EPA National Study was conducted in 2018.

Fulton County Waste Composition Tables

Statewide Waste Composition Study

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on Statewide Waste Composition Study

		Material Categories	Tons Disposed	Mean Composition
Paper			**330**	**28.1%**
	1	Corrugated Cardboard	95	8.1%
	2	Newspaper	8	0.7%
	3	Office/High Grade Paper	6	0.5%
	4	Magazines/Catalogs	8	0.7%
	5	Aseptic Boxes and Gable Top Cartons	6	0.5%
	6	Mixed Recyclables	68	5.8%
	7	Compostable Paper	84	7.2%
	8	Non-recyclable Paper	54	4.6%
Plastic			**255**	**21.7%**
	1	#1 PET Bottles and Jars	16	1.4%
	2	#1 PET Non-Bottles & Containers	4	0.3%
	3	#2 HDPE Natural Bottles	5	0.4%
	4	#2 HDPE Colored Bottles	4	0.3%
	5	#3-#7 Bottles	1	0.1%
	6	#2-#7 Non-Bottle Rigid Containers	15	1.3%
	7	Expanded Polystyrene	15	1.3%
	8	Clean Retail Plastic Bags	1	0.1%
	9	Industrial Film	46	3.9%
	10	All Other Film	76	6.5%
	11	Durable/Bulky Rigid Plastics	33	2.8%
	12	Remainder/Compostable Plastics	39	3.3%
Glass			**28**	**2.4%**
	1	Clear Glass	11	0.9%
	2	Green Glass	4	0.3%
	3	Brown Glass	5	0.4%
	4	Non-recyclable Glass	9	0.8%
Metals			**35**	**3.0%**
	1	Steel Cans	11	0.9%
	2	Aluminum Cans	6	0.5%
	3	Other Aluminum	4	0.3%
	4	Other Ferrous Metals	11	0.9%
	5	Other Non-Ferrous	5	0.4%
Organics			**425**	**36.2%**
	1	Food Waste	175	14.9%
	2	Yard Waste - Grass	9	0.8%
	3	Yard Waste - Other	26	2.2%
	4	Wood - Unpainted	43	3.7%
	5	Wood - Painted	27	2.3%
	6	Textiles and Leather Products	32	2.7%
	7	Diapers and Sanitary Products	38	3.2%
	8	Animal By-Products	34	2.9%
	9	Fines	9	0.8%
	10	Other organics	32	2.7%
Inorganics			**101**	**8.6%**
	1	Electronics - Covered Devices	0	0.0%
	2	Other Electronics	5	0.4%
	3	Carpet and Carpet Padding	9	0.8%
	4	Drywall/Gypsum Board	5	0.4%
	5	Concrete,Rock and Brick	1	0.1%
	6	Asphalt Roofing	0	0.0%
	7	Asphalt Paving	0	0.0%
	8	Other C&D	13	1.1%
	9	Medically-Related Wastes	2	0.2%
	10	Lithium Batteries	0	0.0%
	11	Automotive Batteries	1	0.0%
	12	Other Batteries	1	0.1%
	13	Other HHW	15	0.1%
	14	Bulky Materials	36	1.3%
	15	Furniture	9	3.1%
	16	Other Organics	2	0.8%
	17	PPE	2	0.2%
		Total	**1,173**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on Statewide Waste Composition Study

		Material Categories	Tons Disposed	Mean Composition
Paper			**1,171**	**28.1%**
	1	Corrugated Cardboard	338	8.1%
	2	Newspaper	29	0.7%
	3	Office/High Grade Paper	21	0.5%
	4	Magazines/Catalogs	29	0.7%
	5	Aseptic Boxes and Gable Top Cartons	21	0.5%
	6	Mixed Recyclables	242	5.8%
	7	Compostable Paper	300	7.2%
	8	Non-recyclable Paper	192	4.6%
Plastic			**904**	**21.7%**
	1	#1 PET Bottles and Jars	58	1.4%
	2	#1 PET Non-Bottles & Containers	13	0.3%
	3	#2 HDPE Natural Bottles	17	0.4%
	4	#2 HDPE Colored Bottles	13	0.3%
	5	#3-#7 Bottles	4	0.1%
	6	#2-#7 Non-Bottle Rigid Containers	54	1.3%
	7	Expanded Polystyrene	54	1.3%
	8	Clean Retail Plastic Bags	4	0.1%
	9	Industrial Film	163	3.9%
	10	All Other Film	271	6.5%
	11	Durable/Bulky Rigid Plastics	117	2.8%
	12	Remainder/Compostable Plastics	138	3.3%
Glass			**100**	**2.4%**
	1	Clear Glass	38	0.9%
	2	Green Glass	13	0.3%
	3	Brown Glass	17	0.4%
	4	Non-recyclable Glass	33	0.8%
Metals			**125**	**3.0%**
	1	Steel Cans	38	0.9%
	2	Aluminum Cans	21	0.5%
	3	Other Aluminum	13	0.3%
	4	Other Ferrous Metals	38	0.9%
	5	Other Non-Ferrous	17	0.4%
Organics			**1,509**	**36.2%**
	1	Food Waste	621	14.9%
	2	Yard Waste - Grass	33	0.8%
	3	Yard Waste - Other	92	2.2%
	4	Wood - Unpainted	154	3.7%
	5	Wood - Painted	96	2.3%
	6	Textiles and Leather Products	113	2.7%
	7	Diapers and Sanitary Products	133	3.2%
	8	Animal By-Products	121	2.9%
	9	Fines	33	0.8%
	10	Other organics	113	2.7%
Inorganics			**358**	**8.6%**
	1	Electronics - Covered Devices	0	0.0%
	2	Other Electronics	17	0.4%
	3	Carpet and Carpet Padding	33	0.8%
	4	Drywall/Gypsum Board	17	0.4%
	5	Concrete,Rock and Brick	4	0.1%
	6	Asphalt Roofing	0	0.0%
	7	Asphalt Paving	0	0.0%
	8	Other C&D	46	1.1%
	9	Medically-Related Wastes	8	0.2%
	10	Lithium Batteries	0	0.0%
	11	Automotive Batteries	4	0.0%
	12	Other Batteries	4	0.1%
	13	Other HHW	54	0.1%
	14	Bulky Materials	129	1.3%
	15	Furniture	33	3.1%
	16	Other Organics	8	0.8%
	17	PPE	8	0.2%
		Total	**4,168**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

National Waste Composition Study

Fulton County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on EPA National Study

	Material Categories	Tons Disposed	Mean Composition
Paper		**164**	**14.0%**
Plastic		**223**	**19.0%**
Glass		**59**	**5.0%**
Metals		**106**	**9.0%**
Organics		**575**	**49.0%**
	Yard Trimmings	94	8.0%
	Wood	94	8.0%
	Food Waste	258	22.0%
	Rubber,leather and textiles	129	11.0%
Inorganics		**47**	**4.0%**
	Total	**1,173**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Most recent EPA National Study was conducted in 2018.

Adjusted Fulton County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on EPA National Study

	Material Categories	Tons Disposed	Mean Composition
Paper		**584**	**14.0%**
Plastic		**792**	**19.0%**
Glass		**208**	**5.0%**
Metals		**375**	**9.0%**
Organics		**2,042**	**49.0%**
	Yard Trimmings	333	8.0%
	Wood	333	8.0%
	Food Waste	917	22.0%
	Rubber,leather and textiles	458	11.0%
Inorganics		**167**	**4.0%**
	Total	**4,168**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Most recent EPA National Study was conducted in 2018.

Huntingdon County Waste Composition Tables

Statewide Waste Composition Study

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on Statewide Waste Composition Study

		Material Categories	Tons Disposed	Mean Composition
Paper			**9,903**	**28.1%**
	1	Corrugated Cardboard	2,855	8.1%
	2	Newspaper	247	0.7%
	3	Office/High Grade Paper	176	0.5%
	4	Magazines/Catalogs	247	0.7%
	5	Aseptic Boxes and Gable Top Cartons	176	0.5%
	6	Mixed Recyclables	2,044	5.8%
	7	Compostable Paper	2,537	7.2%
	8	Non-recyclable Paper	1,621	4.6%
Plastic			**7,648**	**21.7%**
	1	#1 PET Bottles and Jars	493	1.4%
	2	#1 PET Non-Bottles & Containers	106	0.3%
	3	#2 HDPE Natural Bottles	141	0.4%
	4	#2 HDPE Colored Bottles	106	0.3%
	5	#3-#7 Bottles	35	0.1%
	6	#2-#7 Non-Bottle Rigid Containers	458	1.3%
	7	Expanded Polystyrene	458	1.3%
	8	Clean Retail Plastic Bags	35	0.1%
	9	Industrial Film	1,374	3.9%
	10	All Other Film	2,291	6.5%
	11	Durable/Bulky Rigid Plastics	987	2.8%
	12	Remainder/Compostable Plastics	1,163	3.3%
Glass			**846**	**2.4%**
	1	Clear Glass	317	0.9%
	2	Green Glass	106	0.3%
	3	Brown Glass	141	0.4%
	4	Non-recyclable Glass	282	0.8%
Metals			**1,057**	**3.0%**
	1	Steel Cans	317	0.9%
	2	Aluminum Cans	176	0.5%
	3	Other Aluminum	106	0.3%
	4	Other Ferrous Metals	317	0.9%
	5	Other Non-Ferrous	141	0.4%
Organics			**12,758**	**36.2%**
	1	Food Waste	5,251	14.9%
	2	Yard Waste - Grass	282	0.8%
	3	Yard Waste - Other	775	2.2%
	4	Wood - Unpainted	1,304	3.7%
	5	Wood - Painted	811	2.3%
	6	Textiles and Leather Products	952	2.7%
	7	Diapers and Sanitary Products	1,128	3.2%
	8	Animal By-Products	1,022	2.9%
	9	Fines	282	0.8%
	10	Other organics	952	2.7%
Inorganics			**3,031**	**8.6%**
	1	Electronics - Covered Devices	0	0.0%
	2	Other Electronics	141	0.4%
	3	Carpet and Carpet Padding	282	0.8%
	4	Drywall/Gypsum Board	141	0.4%
	5	Concrete,Rock and Brick	35	0.1%
	6	Asphalt Roofing	0	0.0%
	7	Asphalt Paving	0	0.0%
	8	Other C&D	388	1.1%
	9	Medically-Related Wastes	70	0.2%
	10	Lithium Batteries	0	0.0%
	11	Automotive Batteries	35	0.0%
	12	Other Batteries	35	0.1%
	13	Other HHW	458	0.1%
	14	Bulky Materials	1,093	1.3%
	15	Furniture	282	3.1%
	16	Other Organics	70	0.8%
	17	PPE	70	0.2%
		Total	**35,242**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Bedford County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on Statewide Waste Composition Study

		Material Categories	Tons Disposed	Mean Composition
Paper			**7,794**	**28.1%**
	1	Corrugated Cardboard	2,247	8.1%
	2	Newspaper	194	0.7%
	3	Office/High Grade Paper	139	0.5%
	4	Magazines/Catalogs	194	0.7%
	5	Aseptic Boxes and Gable Top Cartons	139	0.5%
	6	Mixed Recyclables	1,609	5.8%
	7	Compostable Paper	1,997	7.2%
	8	Non-recyclable Paper	1,276	4.6%
Plastic			**6,019**	**21.7%**
	1	#1 PET Bottles and Jars	388	1.4%
	2	#1 PET Non-Bottles & Containers	83	0.3%
	3	#2 HDPE Natural Bottles	111	0.4%
	4	#2 HDPE Colored Bottles	83	0.3%
	5	#3-#7 Bottles	28	0.1%
	6	#2-#7 Non-Bottle Rigid Containers	361	1.3%
	7	Expanded Polystyrene	361	1.3%
	8	Clean Retail Plastic Bags	28	0.1%
	9	Industrial Film	1,082	3.9%
	10	All Other Film	1,803	6.5%
	11	Durable/Bulky Rigid Plastics	777	2.8%
	12	Remainder/Compostable Plastics	915	3.3%
Glass			**666**	**2.4%**
	1	Clear Glass	250	0.9%
	2	Green Glass	83	0.3%
	3	Brown Glass	111	0.4%
	4	Non-recyclable Glass	222	0.8%
Metals			**832**	**3.0%**
	1	Steel Cans	250	0.9%
	2	Aluminum Cans	139	0.5%
	3	Other Aluminum	83	0.3%
	4	Other Ferrous Metals	250	0.9%
	5	Other Non-Ferrous	111	0.4%
Organics			**10,040**	**36.2%**
	1	Food Waste	4,133	14.9%
	2	Yard Waste - Grass	222	0.8%
	3	Yard Waste - Other	610	2.2%
	4	Wood - Unpainted	1,026	3.7%
	5	Wood - Painted	638	2.3%
	6	Textiles and Leather Products	749	2.7%
	7	Diapers and Sanitary Products	888	3.2%
	8	Animal By-Products	804	2.9%
	9	Fines	222	0.8%
	10	Other organics	749	2.7%
Inorganics			**2,385**	**8.6%**
	1	Electronics - Covered Devices	0	0.0%
	2	Other Electronics	111	0.4%
	3	Carpet and Carpet Padding	222	0.8%
	4	Drywall/Gypsum Board	111	0.4%
	5	Concrete,Rock and Brick	28	0.1%
	6	Asphalt Roofing	0	0.0%
	7	Asphalt Paving	0	0.0%
	8	Other C&D	305	1.1%
	9	Medically-Related Wastes	55	0.2%
	10	Lithium Batteries	0	0.0%
	11	Automotive Batteries	28	0.0%
	12	Other Batteries	28	0.1%
	13	Other HHW	361	0.1%
	14	Bulky Materials	860	1.3%
	15	Furniture	222	3.1%
	16	Other Organics	55	0.8%
	17	PPE	55	0.2%
		Total	**27,736**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

National Waste Composition Study

Huntingdon County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on EPA National Study

	Material Categories	Tons Disposed	Mean Composition
Paper		**4,934**	**14.0%**
Plastic		**6,696**	**19.0%**
Glass		**1,762**	**5.0%**
Metals		**3,172**	**9.0%**
Organics		**17,269**	**49.0%**
	Yard Trimmings	2,819	8.0%
	Wood	2,819	8.0%
	Food Waste	7,753	22.0%
	Rubber,leather and textiles	3,877	11.0%
Inorganics		**1,410**	**4.0%**
	Total	**35,242**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Most recent EPA National Study was conducted in 2018.

Adjusted Huntingdon County Estimate of the Current Composition of Discarded Municipal Waste Stream by Material Available for Recovery Based on EPA National Study

	Material Categories	Tons Disposed	Mean Composition
Paper		**3,883**	**14.0%**
Plastic		**5,270**	**19.0%**
Glass		**1,387**	**5.0%**
Metals		**2,496**	**9.0%**
Organics		**13,591**	**49.0%**
	Yard Trimmings	2,219	8.0%
	Wood	2,219	8.0%
	Food Waste	6,102	22.0%
	Rubber,leather and textiles	3,051	11.0%
Inorganics		**1,109**	**4.0%**
	Total	**27,736**	**100%**

Note: Tonnage totals are from 2022.

Tonnage totals represent estimated amount of material in the waste stream for the respective 2022 calendar year.

Most recent EPA National Study was conducted in 2018.

EPA WARM Model Results

rsion 16

Waste Reduction Model (WARM) -- Inputs

Use this worksheet to describe the baseline and alternative waste management scenarios that you want to compare. The blue shaded areas indicate where you need to enter information.
Please enter data in short tons (1 short ton = 2,000 lbs.)

1. Describe the baseline generation and management for the waste materials listed below.
If the material is not generated in your community or you do not want to analyze it, leave it blank or enter 0. Make sure that the total quantity generated equals the total quantity managed.

2. Describe the alternative management scenario for the waste materials generated in the baseline.
Any decrease in generation should be entered in the Source Reduction column.
Any increase in generation should be entered in the Source Reduction column as a negative value.
Make sure that the total quantity generated equals the total quantity managed.

Material Type	Material	Tons Recycled	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Tons Generated	Tons Source Reduced	Tons Recycled	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested
Paper	Corrugated Containers				NA	NA	0.00					NA	NA
	Magazines/Third-class Mail				NA	NA	0.00					NA	NA
	Newspaper				NA	NA	0.00					NA	NA
	Office Paper				NA	NA	0.00					NA	NA
	Phonebooks				NA	NA	0.00					NA	NA
	Textbooks				NA	NA	0.00					NA	NA
	Mixed Paper (general)				NA	NA	0.00					NA	NA
	Mixed Paper (primarily residential)		40.60		NA	NA	40.60		40.60			NA	NA
	Mixed Paper (primarily from offices)		4,912.69		NA	NA	4,912.69		4,912.69			NA	NA
Food Waste	Food Waste	NA					0.00		NA				
	Food Waste (non-meat)	NA					0.00		NA				
	Food Waste (meat only)	NA					0.00		NA				
	Beef	NA					0.00		NA				
	Poultry	NA					0.00		NA				
	Grains	NA					0.00		NA				
	Bread	NA					0.00		NA				
	Fruits and Vegetables	NA					0.00		NA				
	Dairy Products	NA					0.00		NA				
Yard Trimmings	Yard Trimmings	NA					0.00	NA	NA				
	Grass	NA					0.00	NA	NA				
	Leaves	NA					0.00	NA	NA				
	Branches	NA					0.00	NA	NA				
Mixed Plastics	HDPE		330.72		NA	NA	330.72		330.72			NA	NA
	LDPE	NA			NA	NA	0.00		NA			NA	NA
	PET				NA	NA	0.00					NA	NA
	LLDPE	NA			NA	NA	0.00		NA			NA	NA
	PP				NA	NA	0.00					NA	NA
	PS	NA			NA	NA	0.00		NA			NA	NA
	PVC	NA			NA	NA	0.00		NA			NA	NA
	Mixed Plastics				NA	NA	0.00					NA	NA
Bioplastics	PLA	NA				NA	0.00		NA				NA
Electronics	Desktop CPUs				NA	NA	0.00					NA	NA
	Portable Electronic Devices				NA	NA	0.00					NA	NA
	Flat-Panel Displays				NA	NA	0.00					NA	NA
	CRT Displays				NA	NA	0.00	NA				NA	NA
	Electronic Peripherals				NA	NA	0.00					NA	NA
	Hard-Copy Devices				NA	NA	0.00					NA	NA
	Mixed Electronics				NA	NA	0.00					NA	NA
Metals	Aluminum Cans				NA	NA	0.00					NA	NA
	Aluminum Ingot				NA	NA	0.00					NA	NA
	Steel Cans				NA	NA	0.00					NA	NA
	Copper Wire				NA	NA	0.00					NA	NA
	Mixed Metals		2,424.83		NA	NA	2,424.83		2,424.83			NA	NA
Glass	Glass		0.01		NA	NA	0.01		0.01			NA	NA
Construction Materials	Asphalt Concrete			NA	NA	NA	0.00				NA	NA	NA
	Asphalt Shingles				NA	NA	0.00					NA	NA
	Carpet				NA	NA	0.00					NA	NA
	Clay Bricks	NA		NA	NA	NA	0.00		NA		NA	NA	NA
	Concrete			NA	NA	NA	0.00	NA			NA	NA	NA
	Dimensional Lumber*				NA	NA	0.00					NA	NA
	Drywall			NA	NA	NA	0.00				NA	NA	NA
	Fiberglass Insulation	NA		NA	NA	NA	0.00		NA		NA	NA	NA
	Fly Ash			NA	NA	NA	0.00	NA			NA	NA	NA
	Medium-density Fiberboard	NA			NA	NA	0.00		NA			NA	NA
	Structural Steel			NA	NA	NA	0.00				NA	NA	NA
	Vinyl Flooring	NA			NA	NA	0.00		NA			NA	NA
	Wood Flooring*				NA	NA	0.00					NA	NA
Tires	Tires				NA	NA	0.00					NA	NA
Mixed Materials	Mixed Recyclables		3,221.37		NA	NA	3,221.37	NA	3,221.37			NA	NA
	Mixed Organics	NA	2,412.99				2,412.99	NA	NA			2,412.99	
	Mixed MSW	NA			NA	NA	0.00	NA	NA			NA	NA

Please refer to the User's Guide if you need assistance completing this table.
*Wood Flooring and Dimensional Lumber model reuse under the recycling management pathway.

The column labeled "tons landfilled" in the baseline scenario is the amount of material recycled by the Region in 2022, assuming this material was landfilled instead of recycled.

In the alternative management scenario, the material recycled by the Region in 2022, was accurately put in the recycled or composted column.

The difference between the baseline scenario and the alternative management scenario shows the net benefits realized through recycling and composting by the Region.

3. In order to account for the avoided electricity-related emissions in the landfilling and combustion pathways, EPA assigns the appropriate regional "marginal" electricity grid mix emission factor based on your location. Select state for which you are conducting this analysis.

Please select state or select national average:	Pennsylvania
Region Location:	Middle Atlantic

4. To estimate the benefits from source reduction, EPA usually assumes that the material that is source reduced would have been manufactured from the current mix of virgin and recycled inputs. However, you may choose to estimate the emission reductions from source reduction under the assumption that the material would have been manufactured from 100% virgin inputs in order to obtain an upper bound estimate of the benefits from source reduction. Select which assumption you want to use in the analysis. Note that for materials for which information on the share of recycled inputs used in production is unavailable or is not a common practice; EPA assumes that the current mix is comprised of 100% virgin inputs. Consequently, the source reduction benefits of both the "Current mix" and "100% virgin" inputs are the same.

- (●) Current Mix
- ( ) 100% Virgin

5. The emissions from landfilling depends on whether the landfill where your waste is disposed has a landfill gas (LFG) control system. If you do not know whether your landfill has LFG control, select "National Average" to calculate emissions based on the estimated proportions of landfills with LFG control in 2012 and proceed to question 7. If your landfill does not have a LFG system, select "No LFG Recovery" and proceed to question 8. If a LFG system is in place at your landfill, select "LFG Recovery" and click one of the options in 6a to indicate whether LFG is recovered for energy or flared.

- (●) National Average
- ( ) LFG Recovery
- ( ) No LFG Recovery

6a. If your landfill has gas recovery, does it recover the methane for energy or flare it?

- (●) Recover for energy
- ( ) Flare

6b. For landfills that recover gas, the landfill gas collection efficiency will vary throughout the life of the landfill. Based on a literature review of field measurements and expert discussion, a range of collection efficiencies was estimated for a series of different landfill scenarios. The "typical" landfill is judged to represent the average U.S. landfill, although it must be recognized that every landfill is unique and a typical landfill is an approximation of reality. The worst-case collection scenario represents a landfill that is in compliance with EPA's New Source Performance Standards (NSPS). The aggressive gas collection scenario includes landfills where the operator is aggressive in gas collection relative to a typical landfill. Bioreactor landfills, which are operated to accelerate decomposition, are assumed to collect gas aggressively. The California regulatory collection scenario allows users to estimate and view landfill management results based on California regulatory requirements.

- (●) Typical operation - DEFAULT
- ( ) Worst-case collection
- ( ) Aggressive gas collection
- ( ) California regulatory collection

	Landfill gas collection efficiency (%) assumptions
Typical	*Years 0-1: 0%; Years 2-4: 50%; Years 5-14: 75%; Years 15 to 1 year before final cover: 82.5%; Final cover: 90%*
Worst-case	*Years 0-4: 0%; Years 5-9: 50%; Years 10-14: 75%; Years 15 to 1 year before final cover: 82.5%; Final cover: 90%*
Aggressive	*Year 0: 0%; Years 0.5-2: 50%; Years 3-14: 75%; Years 15 to 1 year before final cover: 82.5%; Final cover: 90%*
California	*Year 0: 0%; Year 1: 50%; Years 2-7: 80%; Years 8 to 1 year before final cover: 85%; Final cover: 90%*

7. Which of the following moisture conditions and associated bulk MSW decay rate (k) most accurately describes the average conditions at the landfill?
The decay rates, also referred to as k values, describe the rate of change per year (yr-1) for the decomposition of organic waste in landfills. A higher average decay rate means that waste decomposes faster in the landfill.

- (●) National average - DEFAULT
- ( ) Dry (k=0.02)
- ( ) Moderate (k = 0.04)
- ( ) Wet (k = 0.06)
- ( ) Bioreactor (k = 0.12)

	Moisture condition assumptions
Dry (k=0.02)	*Less than 20 inches of precipitation per year*
Moderate (k=0.04)	*Between 20 and 40 inches of precipitation per year*
Wet (k=0.06)	*Greater than 40 inches of precipitation per year*
Bioreactor (k=0.12)	*Water is added until the moisture content reaches 40 percent moisture on a wet weight basis*
National average	*Weighted average based on the share of waste received at each landfill type*

8a. For anaerobic digestion of food waste materials (including beef, poultry, grains, bread, fruits and vegetables, and dairy products), please choose the appropriate type of anaerobic digestion process used.
Note that for grass, leaves, branches, yard trimmings and mixed organics, wet digestion is not applicable based on current technology and practices in the United States. Therefore, dry digestion is the only digestion type modeled in WARM for these materials.
Only one type of digestion process (wet or dry) can be modeled at a time in WARM.

- ( ) Wet Digestion
- (●) Dry Digestion

8b. WARM assumes that digestate resulting from anaerobic digestion processes will be applied to land. In many cases, the digestate is cured before land application.
When digestate is cured, the digestate is dewatered and any liquids are recovered and returned to the reactor (when using a wet digester). Next, the digestate is aerobically cured in turned windrows, then screened and applied to agricultural fields.
Select whether the digestate resulting from your anaerobic digester is cured before land application.

- (●) Cured - DEFAULT
- ( ) Not cured

9a. Emissions that occur during transport of materials to the management facility are included in this model. You may use default transport distances, indicated in the table below, or provide information on the transport distances for the various MSW management options.

- (●) Use Default Distances
- ( ) Provide Information

9b. If you have chosen to provide information, please fill in the table below. Distances should be from the curb to the landfill, combustor, or material recovery facility (MRF).
***Please note that if you chose to provide information, you must provide distances for both the baseline and the alternative scenarios.**

Management Option	Default Distance (Miles)	Distance (Miles)
Landfill	20	
Combustion	20	
Recycling	20	
Composting	20	
Anaerobic Digestion	20	

10. If you wish to personalize your results report, input your name & organization, and also specify the project period corresponding to the data you entered above.

Name		SCCSWA 2022 Recycling Data		
Organization		Barton & Loguidice		
Project Period	From	01/01/22	to	12/31/22

Congratulations! You have finished all the inputs.
A summary of your results awaits you on the sheet(s) titled "Summary Report."
For more detailed analyses of results, see the sheet(s) titled "Analysis Results."

Energy Analysis -- Summary Report

Version 16

Energy Waste Management Analysis for Barton & Loguidice
Prepared by: SCCSWA 2022 Recycling Data
Project Period for this Analysis: 01/01/22 to 12/31/22

Note: If you wish to save these results, rename this file (e.g., WARM-MN1) and save it. Then the "Analysis Inputs" sheet of the "WARM" file will be blank when you are ready to make another model run.

Energy Use from Baseline Waste Management (million BTU): (12.57)

Material	Tons Recycled*	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Total Million BTU
Mixed Paper (primarily residential)	-	40.60	-	NA	NA	(6.28)
Mixed Paper (primarily from offices)	-	4,912.69	-	NA	NA	(722.12)
HDPE	-	330.72	-	NA	NA	88.72
Mixed Metals	-	2,424.83	-	NA	NA	650.52
Glass	-	0.01	-	NA	NA	0.00
Mixed Recyclables	-	3,221.37	-	NA	NA	(172.80)
Mixed Organics	NA	2,412.99	-	-	-	149.40
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Energy Use from Alternative Waste Management Scenario (million BTU): (326,353.11)

Material	Tons Source Reduced	Tons Recycled*	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Total Million BTU	Change (Alt - Base) Million BTU
Mixed Paper (primarily residential)	-	40.60	-	-	NA	NA	(834.90)	(828.62)
Mixed Paper (primarily from offices)	-	4,912.69	-	-	NA	NA	(102,430.98)	(101,708.86)
HDPE	-	330.72	-	-	NA	NA	(14,809.05)	(14,897.78)
Mixed Metals	-	2,424.83	-	-	NA	NA	(161,372.13)	(162,022.65)
Glass	-	0.01	-	-	NA	NA	(0.02)	(0.02)
Mixed Recyclables	NA	3,221.37	-	-	NA	NA	(48,128.95)	(47,956.15)
Mixed Organics	NA	NA	-	-	2,412.99	-	1,222.93	1,073.53
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Note: a negative value (i.e., a value in parentheses) indicates a reduction in energy consumption; a positive value indicates an increase.

*Wood Flooring and Dimensional Lumber model reuse under the recycling management pathway.

a) For explanation of methodology, see the EPA WARM Documentation:

Documentation Chapters for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model (WARM)
-- available on the Internet at https://www.epa.gov/warm/documentation-chapters-greenhouse-gas-emission-and-energy-factors-used-waste-reduction-model

b) Energy estimates provided by this model are intended to support voluntary energy measurement and reporting initiatives.

Total Change in Energy Use (million BTU): (326,340.55)

This is equivalent to…		
Conserving	**3,562**	Households' Annual Energy Consumption
Conserving	**56,169**	Barrels of Oil
Conserving	**2,709,291**	Gallons of Gasoline

GHG Emissions Analysis -- Summary Report

Version 16

GHG Emissions Waste Management Analysis for Barton & Loguidice
Prepared by: SCCSWA 2022 Recycling Data
Project Period for this Analysis: 01/01/22 to 12/31/22

Note: If you wish to save these results, rename this file (e.g., WARM-MN1) and save it. Then the "Analysis Inputs" sheet of the "WARM" file will be blank when you are ready to make another model run.

GHG Emissions from Baseline Waste Management ($MTCO_2E$): 1,106.00

Material	Tons Recycled*	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Total $MTCO_2E$
Mixed Paper (primarily residential)	-	40.60	-	NA	NA	0.61
Mixed Paper (primarily from offices)	-	4,912.69	-	NA	NA	558.02
HDPE	-	330.72	-	NA	NA	6.70
Mixed Metals	-	2,424.83	-	NA	NA	49.11
Glass	-	0.01	-	NA	NA	0.00
Mixed Recyclables	-	3,221.37	-	NA	NA	110.13
Mixed Organics	NA	2,412.99	-	-	-	381.43

GHG Emissions from Alternative Waste Management Scenario ($MTCO_2E$): (37,965.65)

Material	Tons Source Reduced	Tons Recycled*	Tons Landfilled	Tons Combusted	Tons Composted	Tons Anaerobically Digested	Total $MTCO_2E$	Change (Alt - Base) $MTCO_2E$
Mixed Paper (primarily residential)	-	40.60	-	-	NA	NA	(143.95)	(144.56)
Mixed Paper (primarily from offices)	-	4,912.69	-	-	NA	NA	(17,585.48)	(18,143.50)
HDPE	-	330.72	-	-	NA	NA	(250.83)	(257.53)
Mixed Metals	-	2,424.83	-	-	NA	NA	(10,647.82)	(10,696.93)
Glass	-	0.01	-	-	NA	NA	(0.00)	(0.00)
Mixed Recyclables	NA	3,221.37	-	-	NA	NA	(9,022.90)	(9,133.02)
Mixed Organics	NA	NA	-	-	2,412.99	-	(314.67)	(696.10)

Total Change in GHG Emissions ($MTCO_2E$): (39,071.65)

Note: a negative value (i.e., a value in parentheses) indicates an emission reduction; a positive value indicates an emission increase.

*Wood Flooring and Dimensional Lumber model reuse under the recycling management pathway.

a) For explanation of methodology, see the EPA WARM Documentation:
Documentation Chapters for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model (WARM)
-- available on the Internet at https://www.epa.gov/warm/documentation-chapters-greenhouse-gas-emission-and-energy-factors-used-waste-reduction-model

b) Emissions estimates provided by this model are intended to support voluntary GHG measurement and reporting initiatives.

c) The GHG emissions results estimated in WARM indicate the full life-cycle benefits waste management alternatives. Due to the timing of the GHG emissions from the waste management pathways, (e.g., avoided landfilling and increased recycling), the actual GHG implications may accrue over the long-term. Therefore, one should not interpret the GHG emissions implications as occurring all in one year, but rather through time.

This is equivalent to...

Removing annual emissions from	**8,295**	Passenger Vehicles
Conserving	**4,396,495**	Gallons of Gasoline
Conserving	**1,627,985**	Cylinders of Propane Used for Home Barbeques
	0.00219%	Annual CO_2 emissions from the U.S. transportation sector
	0.00216%	Annual CO_2 emissions from the U.S. electricity sector