Annexure B - 1

Quebec's Sustainable Community project

Summation of the GHG emissions, baseline, projects and reduction quantification

The 5th Monitoring Report to be submitted to the VCS program covering the period of January 1st 2019 to December 31th 2019

Last revision: November 20, 2023

Table to be included in the Monitoring Report (MR)

Year	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions (tCO_2e)
2019	**796 229**	**16 210**	***de minimus***	**780 019**
2019 from excluded new PAI	6 257	11	*de minimus*	6 246
2018	*356 166*	*278*	*de minimus*	*355 888*
2015-2017	*852*	*15*	*de minimus*	*837*
Total	1 159 504	16 514	*de minimus*	1 142 990

Annexure B-1

Quebec's Sustainable Community project

Summation of the GHG emissions, baseline, projects and reduction quantification

5th Monitoring Report (MR) period covered: **January 1,2019 to December 31, 2019.**

	2019			
	Baseline emissions (tCO2e)	**Project emissions** (tCO2e)	**Leakage emissions** (tCO_2e)	**Net GHG emission reductions** (tCO2e)
2019	796 229	16 210	*de minimus*	**780 019**
Total	796 229	16 210	*de minimus*	**780 019**
Scope 3 2019	249 017	16 210		232 807
Total Scope 3	249 017	16 210		232 807
Scope 13 2019	547 212	0		547 212
Total Scope 13	547 212	0		**547 212**
Total Scope 3 + 13	796 229	16 210		**780 019**

		GHG emissions in (tCO2e)			
	Group of members	**Baseline emissions** (tCO2e)	**Project emissions** (tCO2e)	**Leakage emissions** (tCO_2e)	**Net GHG emission reductions** (tCO2e)
1	01-Matapédia	498	111	*de minimus*	387
2	03-Basques	3 187	461	*de minimus*	2 726
3	04-Rivière-du-loup	1 727	14	*de minimus*	1 713
4	05-Kamouraska	5 339	36	*de minimus*	5 303
5	06-Lotbinière	33 998	6 888	*de minimus*	27 110
6	07-Haut-Saguenay	126 264	3 452	*de minimus*	122 812
7	08-Maskinongé	101 082	24	*de minimus*	101 058
8	09-Rive-Nord	18 671	0	*de minimus*	18 671
9	10-Laurentides	22 390	2 987	*de minimus*	19 403
10	11-Antoine-Labelle	37 943	372	*de minimus*	37 571
11	12-Abitibi Ouest	7 421	386	*de minimus*	7 035
12	13-Papineau	77 325	4	*de minimus*	77 321
13	14-D'Autray-Joliette	0	0	*de minimus*	0
14	*First cohort members*	162 241	1 353	*de minimus*	160 888
15	*Members recruited by Will*	198 143	122	*de minimus*	198 021
Total	**15**	**796 229**	**16 210**	**0**	**780 019**

Annexure B-1

Quebec's Sustainable Community project

Summation fo the GHG emissions, baseline, projects and reduction quantification

5th Monitoring Report (MR) period covered : ***January 1,2019 to December 31, 2019.***

2019

Last revision: November 20, 2023

						GHG emissions in (tCO2e)			
	Group of members	**ACTIVE MEMBERS**	**Number of PAI, Scope 3**	**Number of PAI, scope 13**	**Total PAI**	**Baseline emissions** (tCO2e)	**Project emissions** (tCO2e)	**Leakage emissions** (tCO_2e)	**Net GHG emission reductions** (tCO2e)
1	01-Matapédia	2	3	0	3	498	111	*de minimus*	387
2	03-Basques	7	44	4	48	3 187	461	*de minimus*	2 726
3	04-Rivière-du-loup	2	15	1	16	1 727	14	*de minimus*	1 713
4	05-Kamouraska	5	12	23	35	5 339	36	*de minimus*	5 303
5	06-Lotbinière	4	21	1	22	33 998	6 888	*de minimus*	27 110
6	07-Haut-Saguenay	7	12	138	150	126 264	3 452	*de minimus*	122 812
7	08-Maskinongé	5	3	68	71	101 082	24	*de minimus*	101 058
8	09-Rive-Nord	2	1	9	10	18 671	0	*de minimus*	18 671
9	10-Laurentides	3	17	0	17	22 390	2 987	*de minimus*	19 403
10	11-Antoine-Labelle	4	21	54	75	37 943	372	*de minimus*	37 571
11	12-Abitibi Ouest	7	23	3	26	7 421	386	*de minimus*	7 035
12	13-Papineau	7	24	56	80	77 325	4	*de minimus*	77 321
13	14-D'Autray-Joliette	0	0	0	0	0	0	*de minimus*	0
14	*First cohort members*	2	5	55	60	162 241	1 353	*de minimus*	160 888
15	*Members recruited by Will*	2	110	12	122	198 143	122	*de minimus*	198 021
Total	**15**	**59**	**311**	**424**	**735**	**796 229**	**16 210**	**0**	**780 019**

Annexure B-1 and C-1

Quebec's Sustainable Community project

Summation of the GHG emissions, baseline, projects and reduction quantification

5th Monitoring Report (MR) period covered: ***January 1.2019 to December 31. 2019.***

Last revision: November 20, 2023

SCOPE 3

Client Facilities in red: CF that did not participate to this MR(period; see "Non-participation" sheet for details of non-participation.

Client Facilities	Number of PAs, Scope 3	2019 GHG emissions in (tCO2e) - rouded down: Baseline emissions (tCO2e)	Project emissions (tCO2e)	Net GHG emission reductions (tCO2e)	Generic PAI I	Generic PAI III	Generic PAI IV	Generic PAI V	Generic PAI VI	Generic PAI VII	Generic PAI VIII	Generic PAI IX	Generic PAI X	Total PAI
Client Facility 0101	1	426,0	99,0	327,0	1									1
Client Facility 0108	2	72,0	12,0	60,0							2			2
Sub-total	**3**	**498,0**	**111,0**	**387,0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**
Client Facility 0301	1	293,0	214,0	79,0	1									1
Client Facility 0302	4	244,0	208,0	36,0	1						2	1		4
Client Facility 0303	0	0,0	0,0	0,0	0									0
Client Facility 0305	1	716,0	10,0	706,0	1									1
Client Facility 0306	34	1 642,0	5,0	1 637,0							34			34
Client Facility 0307	1	24,0	19,0	5,0	1									1
Client Facility 0308	2	58,0	5,0	53,0							2			2
Client Facility 0309	1	10,0	0,0	10,0	1									1
Sub-total	**44**	**2 987,0**	**461,0**	**2 526,0**	**5**	**0**	**0**	**0**	**0**	**0**	**38**	**1**	**0**	**44**
Client Facility 0403	1	272,0	0,0	272,0	1									1
Client Facility 0404	14	1 385,0	14,0	1 371,0							14			14
Sub-total	**15**	**1 657,0**	**14,0**	**1 643,0**	**1**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**15**
Client Facility 0502	1	636,0	7,0	629,0	1									1
Client Facility 0503	0	0,0	0,0	0,0							0			0
Client Facility 0504	4	462,0	29,0	433,0							3		1	4
Client Facility 0507	1	36,0	0,0	36,0							1			1
Client Facility 0508	6	165,0	0,0	165,0							6			6
Client Facility 0512	0	0,0	0,0	0,0										0
Sub-total	**12**	**1 299,0**	**36,0**	**1 263,0**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**1**	**12**
Client Facility 0601	10	2 510,0	93,0	2 417,0	9						1			10
Client Facility 0602	3	1 699,0	200,0	1 499,0				1			1	1		3
Client Facility 0603	0	0,0	0,0	0,0							0			0
Client Facility 0604	6	18 645,0	6 261,0	12 384,0						3	3			6
Client Facility 0605	2	1 001,0	334,0	667,0						2				2
Sub-total	**21**	**23 855,0**	**6 888,0**	**16 967,0**	**9**	**0**	**0**	**1**	**0**	**5**	**5**	**1**	**0**	**21**
Client Facility 0701	1	7,0	0,0	7,0							1			1
Client Facility 0702	2	600,0	375,0	225,0						1			1	2
Client Facility 0703	0	0,0	0,0	0,0	0						0			0
Client Facility 0704	1	56,0	0,0	56,0							1			1
Client Facility 0705	0	0,0	0,0	0,0							0			0
Client Facility 0706	7	11 205,0	3 077,0	8 128,0						7				7
Client Facility 0707	0	0,0	0,0	0,0										0
Client Facility 0709	0	0,0	0,0	0,0										0
Client Facility 0710	1	3 186,0	0,0	3 186,0	1									1
Client Facility 0712	0	0,0	0,0	0,0										0
Client Facility 0711	0	0,0	0,0	0,0							0			0
Client Facility 0713	0	0,0	0,0	0,0							0			0
Client Facility 0714	0	0,0	0,0	0,0							0		0	0
Sub-total	**12**	**15 054,0**	**3 452,0**	**11 602,0**	**1**	**0**	**0**	**0**	**0**	**8**	**2**	**0**	**1**	**12**
Client Facility 0801	0	0,0	0,0	0,0	0						0			0
Client Facility 0802	1	331,0	22,0	311,0	1									1
Client Facility 0803	0	0,0	0,0	0,0						0			0	0
Client Facility 0804	2	78,0	2,0	76,0									2	2
Client Facility 0805	0	0,0	0,0	0,0										0
Client Facility 0806	0	0,0	0,0	0,0										0
Client Facility 0808	0	0,0	0,0	0,0										0
Sub-total	**3**	**411,0**	**24,0**	**387,0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
Client Facility 0901	0	0,0	0,0	0,0										0
Client Facility 0902	0	0,0	0,0	0,0										0
Client Facility 0903	0	0,0	0,0	0,0							0			0
Client Facility 0910	1	56,0	0,0	56,0							1			1
Client Facility 0905	0	0,0	0,0	0,0	0									0
Sub-total	**1**	**56,0**	**0,0**	**56,0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
Client Facility 1001	0	0,0	0,0	0,0						0	0			0
Client Facility 1005	7	21 210,0	2 182,0	19 028,0	7									7
Client Facility 1008	1	24,0	2,0	22,0									1	1
Client Facility 1011	9	1 156,0	803,0	353,0							9			9
Sub-total	**17**	**22 390,0**	**2 987,0**	**19 403,0**	**7**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**1**	**17**
Client Facility 1101	20	2 416,0	371,0	2 045,0							10	10		20
Client Facility 1102	1	139,0	1,0	138,0							1			1
Client Facility 1103	0	0,0	0,0	0,0										0
Client Facility 1108	0	0,0	0,0	0,0										0
Sub-total	**21**	**2 555,0**	**372,0**	**2 183,0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**10**	**0**	**21**
Client Facility 1201	1	128,0	0,0	128,0							1			1
Client Facility 1204	1	21,0	9,0	12,0							1			1
Client Facility 1205	1	370,0	304,0	66,0							1			1
Client Facility 1206	0	0,0	0,0	0,0	0									0
Client Facility 1207	0	0,0	0,0	0,0										0
Client Facility 1208	1	166,0	2,0	164,0							1			1
Client Facility 1209	1	13,0	0,0	13,0	1									1
Client Facility 1210	18	667,0	71,0	596,0	18									18
Sub-total	**23**	**1 365,0**	**386,0**	**979,0**	**19**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**23**
Client Facility 1302	0	0,0	0,0	0,0										0
Client Facility 1303	1	80,0	0,0	80,0							1			1
Client Facility 1304	0	0,0	0,0	0,0										0
Client Facility 1305	0	0,0	0,0	0,0							0			0
Client Facility 1308	0	0,0	0,0	0,0										0
Client Facility 1309	1	6,0	4,0	2,0						1				1
Client Facility 1314	0	0,0	0,0	0,0										0
Client Facility 1312	20	28 930,0	0,0	28 930,0	20									20
Client Facility 1330	2	18,0	0,0	18,0							2			2
Sub-total	**24**	**29 024,0**	**4,0**	**29 020,0**	**20**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**24**
Client Facility 1401	0	0,0	0,0	0,0										0
Client Facility 1403	0	0,0	0,0	0,0							0			0
Client Facility 1404	0	0,0	0,0	0,0							0			0
Sub-total	**0**	**0,0**	**0,0**	**0,0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Client Facility 1601	4	11 754,0	1 340,0	10 414,0	4									4
Client Facility 1602	0	0,0	0,0	0,0				0		0	0			0
Client Facility 1603	1	26,0	13,0	13,0				1						1
Client Facility 1604	0	0,0	0,0	0,0						0	0			0
Client Facility 1605	0	0,0	0,0	0,0				0				0		0
Sub-total	**5**	**11 780,0**	**1 353,0**	**10 427,0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**
Client Facility 0002	76	46 022,0	1,0	46 022,0	76									76
Client Facility 0003	34	90 053,0	121,0	89 932,0			34							34
Sub-total	**110**	**136 086,0**	**122,0**	**135 964,0**	**76**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**0**	**110**
Total	**311**	**249 017**	**16 210**	**232 807**	**145**	**0**	**34**	**2**	**0**	**14**	**99**	**12**	**5**	**311**
	Number of PAs, Scope 3	Baseline emissions (tCO2e)	Project emissions (tCO2e)	Net GHG emission reductions (tCO2e)										

Annexure B-1 and C-1

Quebec's Sustainable Community project

Summation fo the GHG emissions, baseline, projects and reduction quantification

5th Manchester Resort (WELL certified project) - January 1, 2019 to December 31, 2019

Last revision: November 20, 2023

SCOPE 13

		2019						
		GHG emissions in (tCO2e) - rounded down			Generic PAI's			Total PAI
	Number of PAI, Scope 13	Baseline emissions (tCO2e)	Project emissions (tCO2e)	Net GHG emission reductions (tCO2e)	Reuse	Composting	Recycling	
Client Facility 0101	0	0,0	0,0	0,0				0
Client Facility 0102	0	0,0	0,0	0,0				0
Sub-total	**0**	**0,0**	**0,0**	**0,0**	**0**	**0**	**0**	**0**
Client Facility 0301	0	0,0	0,0	0,0				0
Client Facility 0302	2	19,0	0,0	19,0	2			2
Client Facility 0303	0	0,0	0,0	0,0				0
Client Facility 0305	0	0,0	0,0	0,0				0
Client Facility 0306	0	0,0	0,0	0,0				0
Client Facility 0307	0	0,0	0,0	0,0				0
Client Facility 0308	0	0,0	0,0	0,0				0
Client Facility 0309	2	181,0	0,0	181,0	1	1		2
Sub-total	**4**	**200,0**	**0,0**	**200,0**	**3**	**1**	**0**	**4**
Client Facility 0403	1	70,0	0,0	70,0		1		1
Client Facility 0404	0	0,0	0,0	0,0				0
Sub-total	**1**	**70,0**	**0,0**	**70,0**	**0**	**1**	**0**	**1**
Client Facility 0502	0	0,0	0,0	0,0				0
Client Facility 0503	0	0,0	0,0	0,0				0
Client Facility 0504	3	2 144,0	0,0	2 144,0		2	1	3
Client Facility 0507	19	1 088,0	0,0	1 088,0	3	16		19
Client Facility 0508	0	0,0	0,0	0,0				0
Client Facility 0512	1	808,0	0,0	808,0			1	1
Sub-total	**23**	**4 040,0**	**0,0**	**4 040,0**	**3**	**18**	**2**	**23**
Client Facility 0601	1	10 143,0	0,0	10 143,0	1			1
Client Facility 0602	0	0,0	0,0	0,0				0
Client Facility 0603	0	0,0	0,0	0,0				0
Client Facility 0604	0	0,0	0,0	0,0				0
Client Facility 0605	0	0,0	0,0	0,0				0
Sub-total	**1**	**10 143,0**	**0,0**	**10 143,0**	**1**	**0**	**0**	**1**
Client Facility 0701	0	0,0	0,0	0,0				0
Client Facility 0702	0	0,0	0,0	0,0				0
Client Facility 0703	0	0,0	0,0	0,0	0	0	0	0
Client Facility 0704	0	0,0	0,0	0,0	0	0	0	0
Client Facility 0705	0	0,0	0,0	0,0				0
Client Facility 0706	1	2 002,0	0,0	2 002,0	1			1
Client Facility 0707	48	52 286,0	0,0	52 286,0		48		48
Client Facility 0709	0	0,0	0,0	0,0		0		0
Client Facility 0710	86	56 062,0	0,0	56 062,0	86			86
Client Facility 0712	3	860,0	0,0	860,0			3	3
Client Facility 0711	0	0,0	0,0	0,0			0	0
Client Facility 0713	0	0,0	0,0	0,0				0
Client Facility 0714	0	0,0	0,0	0,0				0
Sub-total	**138**	**111 210,0**	**0,0**	**111 210,0**	**87**	**48**	**3**	**138**
Client Facility 0801	0	0,0	0,0	0,0				0
Client Facility 0802	0	0,0	0,0	0,0				0
Client Facility 0803	0	0,0	0,0	0,0				0
Client Facility 0804	0	0,0	0,0	0,0				0
Client Facility 0805	14	57 462,0	0,0	57 462,0	14			14
Client Facility 0806	39	444,0	0,0	444,0		39		39
Client Facility 0808	15	42 765,0	0,0	42 765,0	15			15
Sub-total	**68**	**100 671,0**	**0,0**	**100 671,0**	**29**	**39**	**0**	**68**
Client Facility 0901	3	5 128,0	0,0	5 128,0		2	1	3
Client Facility 0902	0	0,0	0,0	0,0		0		0
Client Facility 0903	0	0,0	0,0	0,0				0
Client Facility 0910	6	13 487,0	0,0	13 487,0	5		1	6
Client Facility 0905	0	0,0	0,0	0,0	0			0
Sub-total	**9**	**18 615,0**	**0,0**	**18 615,0**	**5**	**2**	**2**	**9**
Client Facility 1001	0	0,0	0,0	0,0			0	0
Client Facility 1005	0	0,0	0,0	0,0				0
Client Facility 1008	0	0,0	0,0	0,0				0
Client Facility 1011	0	0,0	0,0	0,0				0
Sub-total	**0**	**0,0**	**0,0**	**0,0**	**0**	**0**	**0**	**0**
Client Facility 1101	3	5 281,0	0,0	5 281,0	3			3
Client Facility 1102	0	0,0	0,0	0,0				0
Client Facility 1103	48	17 701,0	0,0	17 701,0		36	12	48
Client Facility 1108	3	12 406,0	0,0	12 406,0		2	1	3
Sub-total	**54**	**35 388,0**	**0,0**	**35 388,0**	**3**	**38**	**13**	**54**
Client Facility 1201	0	0,0	0,0	0,0				0
Client Facility 1204	0	0,0	0,0	0,0				0
Client Facility 1205	0	0,0	0,0	0,0				0
Client Facility 1206	0	0,0	0,0	0,0				0
Client Facility 1207	3	6 056,0	0,0	6 056,0		2	1	3
Client Facility 1208	0	0,0	0,0	0,0				0
Client Facility 1209	0	0,0	0,0	0,0				0
Client Facility 1210	0	0,0	0,0	0,0				0
Sub-total	**3**	**6 056,0**	**0,0**	**6 056,0**	**0**	**2**	**1**	**3**
Client Facility 1302	2	876,0	0,0	876,0		1	1	2
Client Facility 1303	0	0,0	0,0	0,0				0
Client Facility 1304	0	0,0	0,0	0,0		0	0	0
Client Facility 1305	0	0,0	0,0	0,0				0
Client Facility 1308	2	12,0	0,0	12,0		2		2
Client Facility 1309	3	17,0	0,0	17,0	2		1	3
Client Facility 1314	33	5 212,0	0,0	5 212,0		33		33
Client Facility 1312	15	42 118,0	0,0	42 118,0	15			15
Client Facility 1330	1	65,0	0,0	65,0			1	1
Sub-total	**56**	**48 301,0**	**0,0**	**48 301,0**	**17**	**36**	**3**	**56**
Client Facility 1401	0	0,0	0,0	0,0			0	0
Client Facility 1403	0	0,0	0,0	0,0	0		0	0
Client Facility 1404	0	0,0	0,0	0,0				0
Sub-total	**0**	**0,0**	**0,0**	**0,0**	**0**	**0**	**0**	**0**
Client Facility 1601	53	146 504,0	0,0	146 504,0	53			53
Client Facility 1602	0	0,0	0,0	0,0				0
Client Facility 1603	2	3 957,0	0,0	3 957,0	1		1	2
Client Facility 1604	0	0,0	0,0	0,0		0	0	0
Client Facility 1605	0	0,0	0,0	0,0				0
Sub-total	**55**	**150 461,0**	**0,0**	**150 461,0**	**54**	**0**	**1**	**55**
Client Facility 0002	12	62 057,0	0,0	62 057,0	12			12
Client Facility 0003	0	0,0	0,0	0,0				0
Sub-total	**12**	**62 057,0**	**0,0**	**62 057,0**	**12**	**0**	**0**	**12**
Total	**424**	**547 212**	**0**	**547 212**	**214**	**185**	**25**	**424**
	Number of PAI, Scope 13	Baseline emissions (tCO2e)	Project emissions (tCO2e)	Net GHG emission reductions (tCO2e)				

CF 0101

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch fuel from oil no. 2 to biomass**	
Inputs (*original name in french*)	Conversion chauffage à huile vers biomasse	
Baseline emissions (tCO_2e)	426,666695	426,67
Project emissions (tCO_2e)	99,621859	99,62
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	327,044836	**327,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no 2 consumption	
Data in	**156 017,51**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	426,666695	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**230,22**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,008280	
Projects emissions (tCO_2e)		
Description	Oil no 2 consumption after PAI	
Data in	**36 425,30**	
EF used (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	99,613579	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0101
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	yearly cost of oil consumption	$		2012		
	Evidence provided by client's facility	average unit price per liters oil	$/L		2012		
	Will's calculations	yearly oil consumption	L	2018 and 2019 data is evidence provided by client's facility	2012	36 425,30	Project
	Will's calculations	Calorific value of oil consumption	Mj		2012	1 402 374,05	
	Evidence provided by client's facility	yearly cost of biomass	$		2012		
	Evidence provided by client's facility	average unit price per MT of biomass (WET BIOMASS)	$/MT		2012		
	Will's calculations	yearly biomass consumption	MT	2018 and 2019 data is evidence provided by client's facility	2012	230,22	
	Will's calculations	Calorific value of biomass consumption	Mj		2012	4 604 300,00	Project
	Will's calculations	Total calorific value	Mj		2012	6 006 674,05	
	Will's calculations	Equivalent oil consumtion	L		2012	156 017,51	Baseline

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

3 BUILDINGS UP TO SEVEN	from 2011 and 2012 heating 3 buildings. Beyond that 7 buildings are connected and heated with the heat network
110 $	per ton of dry biomass; reference from a Quebec expert about biomass and advisor for the client facility (on 3 nov. 2018).
75 $	per MT anhydride (tonne de bois vert) reference from a Quebec expert about biomass and advisor for the client facility, (on 3 nov. 2018).
38,5	MJ/liter of oil no.2
20	MJ/kg of biomass (bark)

CF 0108

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	**1**	**2**	
Inputs (english)	**Switch fuel from oil to biomass**	**Conversion diesel chairlift to electricity**	
Inputs (*original name in french*)	Conversion chauffage huile vers biomasse	Conversion télésiège diesel vers électricité	
Baseline emissions (tCO_2e)	52,735555	19,518508	72,25
Project emissions (tCO_2e)	12,366763	0,546643	12,91
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	40,368792	18,971865	**59,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Oil no. 2 consumption	Diesel Consumption	
Data in	**19 283,60**	**6 996,40**	
EF (tCO2e/Metric tons)	0,002735	0,002790	
Equation: result in tCO_2e	52,735555	19,518508	
Projects emissions (tCO_2e)			
Description	Biomass consumption	Electricity consumption	
Data in	**15,58**	**267 962,12**	
EF (tCO2e/Metric tons)	0,000036	0,000002	
Equation: result in tCO_2e	0,000560	0,546643	
Projects emissions (tCO_2e)			
Description	Oil no. 2 consumption after PAI	-	
Data in	**4 521,90**	**0,00**	
EF used (tCO2e/Metric tons)	0,002735	0,000000	
Equation: result in tCO_2e	12,366203	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VIII	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0108
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2011	2009	Others
1	Evidence provided by client facility	Oil comsumption	*L*		2011	4 521,90	19 283,60	15 647,30	*Baseline in blue Project in red*
	Evidence provided by client facility	Biomass consumption	*Mt(a)*	MT(a) tonne métrique anhydre		15,58	0,00	0,00	
2	Evidence provided by client facility	Diesel consumption	*L*		2009		0,00	6 996,40	*Baseline in blue Project in red*
	Will's calculations	Electricity conversion	*KWh*	38,3 KWh/litre of diesel	2009	267 962,12			

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0301

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Conversion of oil no.2 to biomass**	
Inputs (*original name in french*)	Conversion du mazout vers la biomasse	
Baseline emissions (tCO_2e)	293,933254	293,93
Project emissions (tCO_2e)	214,359910	214,36
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	79,573344	**79,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	oil no.2 consumption	
Data in Liters (L)	**107 481,40**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	293,933254	
Projects emissions (tCO_2e)		
Description	Biomass	
Data in Metric tons (Mt)	**101,36**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,003645	
Projects emissions (tCO_2e)		
Description	Oil consumption after PAI	
Data in Liters (L)	**78 382,80**	
EF used (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	214,356265	
Source of Emission Factor (EF)	**MERN 20219**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0301
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2012	Others
1	Evidence provided from CSFL	Delivered volumes of oil no.2	*L*	Oil no.2 consumption after PAI	2012	*78 382,80*	107 481,40	*Baseline in blue* *Project in red*
	Evidence provided from CSFL	Delivered volumes of biomass	Mt		2012	101,36		*Project in red*

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims. Evidence included :

Volume biomasse 2019	**289,59**	**m3**
Masse volumique (briquette)	350	**kg/m3**
Masse biomasse	101356,5	**kg**
Masse biomasse	101,3565	**Mt**

Assumptions/notes on each PAI's:

PAI

CF 0302

Traceability realized on each micro-project

2019	Scope 3				Sous-total
PAI	1	2	3	4	
Inputs (english)	**Conversion of oil no.2 boiler to a propane boiler**	**Replacement of 2 diesel forklifts for 2 electric forklifts**	**Use of programmable thermostats for optimization**	**Replacing oil no.2 for shredded wood pallets**	
Inputs (*original name in french*)	Conversion huile no.2 vers le propane	Remplacement 2 chariots diesel pour 2 chariots électriques	Utilisation de thermostats programmable	Remplacement de l'huile no.2 pour copeaux de bois	
Baseline emissions (tCO_2e)	103,075965	25,142730	103,075965	13,261315	244,56
Project emissions (tCO_2e)	94,809325	12,571365	101,488596	0,000350	208,87
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	8,266640	12,571365	1,587370	13,260966	**244,00**
Baseline emissions (tCO_2e)					
Baseline scenario description	Oil no. 2 consumption	Diesel consumption	Oil no. 2 consumption	Oil no. 2 consumption	
Data in	**37 691,38**	**9 012,40**	**37 691,38**	**4 849,21**	
EF (tCO2e/Metric tons)	0,002735	0,002790	0,002735	0,002735	
Equation: result in tCO_2e	103,075965	25,142730	103,075965	13,261315	
Projects emissions (tCO_2e)					
Description	Propane consumption	Diesel consumption	Oil no. 2 consumption	Biomass consumption	
Data in	**32 568,40**	**4 506,20**	**37 110,93**	**9,72**	
EF (tCO2e/Metric tons)	0,001544	0,002790	0,002735	0,000036	
Equation: result in tCO_2e	50,285089	12,571365	101,488596	0,000350	
Projects emissions (tCO_2e)					
Description	Oil no. 2 consumption	-	-	-	
Data in	**16 281,00**	**0,00**	**0,00**	**0,00**	
EF used (tCO2e/Metric tons)	0,002735	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	44,524237	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VIII	PAI IX	PAI I	
Number of PAI attributed	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Cardboard reuse instead of sending it to landfill**	**Wood reuse instead of sending it to landfill**	
Inputs (*original name in french*)	Réutilisation du carton	Réutilisation de bois de pallettes	
Baseline emissions (tCO_2e)	5,263194	14,288925	19,55
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	5,263194	14,288925	**19,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Waste stream avoided from landfill and reused	Waste stream avoided from landfill and reused	
Data in Metric tons (Mt)	**1,75**	**9,72**	
EF (tCO2e/Metric tons)	3,01270	1,47005	
Equation: result in tCO_2e	5,263194	14,288925	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Projects emissions (tCO_2e)			
Description	-	-	
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF used (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM version 2020**	**USEPA WARM version 2020**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0302
Ground Data Supply

SCOPE 3: Energy Efficiency

1000

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	**Evidence provided by the client facili**	**Oil no. 2 annual consumption**	**L**		**2015**	**16 281,00**	
		Oil no. 2 calorific value	BTU	36 500	BTU/L of oil no. 2	594 256 500	
1	**Evidence provided by the client facili**	**Propane annual consumption**	**L**		**2015**	**32 568,40**	
		Propane calorific value	BTU	23 995	BTU/L of propane	781 478 758	
		Total calorific value (oil and propane)	BTU			1 375 735 258	
2&3		Total equivalent oil no. 2	L	36 500		**37 691**	
2	**Evidence provided by the client facili**	**Diesel annual consumption**	**L**		**2010**	**4 506,20**	
		Ann. av. diesel consumption per trolley	L	2	2 diesel trolley	2 253,10	
4	**Evidence provided by the client facili**	**Amount of wood pallets reused for heatir**	**tons**		**2010**	**9,72**	
		Biomass calorific value	BTU	18 202 000	BTU/Mt biomass	176 996 248	
4		Equivalent of oil no. 2	L	36 500	BTU/L of oil no. 2	**4 849**	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 Conversion of oil no. 2 boiler to a propane boiler: baseline data is the equivalent comsumption of oil no. 2 of the total calorific value of the oil and propane used.
PAI 2 Replacement of 2 diesel forklifts for 2 electric forklifts. **Total of 4 trolleys**: 2 electrical trolley and 2 diesel.
PAI 3 Energy saving by the use of programmable thermostats is (2013-2014)/2013 **1,54%**
PAI 4 Replacing oil no.2 for shredded wood pallets, baseline is based of the equivalent liters of oil no. 2 for the biomass calorific value.

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	**Evidence provided by FVR**	Amount of cardboard recycled annually	**tons**		**2010**	**1,75**	
2	**Evidence provided by FVR**	Wood pallets reused annually for heating in diversion from landfill	**tons**		**2010**	**9,72**	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI
PAI

CF 0305

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch fuel from oil no. 2 to biomass**	
Inputs (*original name in french*)	Conversion chauffage vers biomasse en réseau de chaleur	
Baseline emissions (tCO_2e)	716,792660	716,79
Project emissions (tCO_2e)	10,533111	10,53
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	706,259549	**706,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil consumption	
Data in	**262 106,71**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	716,792660	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**403,04**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,014496	
Projects emissions (tCO_2e)		
Description	Oil consumption after PAI	
Data in	**3 846,30**	
EF used (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	10,518615	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0305
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2018	2017	2016	2015	2014	2013	Others
1	Evidence provided by client's facility	Oil no. 2 annual consumption	*L*		2013	**3 846,30**	4 108,00	7 128,60	*4 178,40*	*5 097,50*	*5 551,20*	*71 312,00*	
	Evidence provided by client's facility	Biomass annual consumption	Mt		2013	**403,04**	397,80	381,70	387,90	233,30	101,40		
	Will's calculation	Energy used from biomass	Mj	With biomass consumption					7 447 680,00	4 479 360,00			
	Will's calculation	Energy equivalent oil consumption from 2015 (biomass)	L	With an EE of an oil boiler at 75%					257 928,31	155 129,35			
	Will's calculation	**Baseline oil consumption**	**L**	**for year 2013**	**2013**							**262 106,71**	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.
Energy used in Mjoules; with biomass consumption of 2016 , which is a full year operation beyond all operation adjustment.
The estimated oil consumption was established (for the pre quantification) at 71 312 liters for the 2013 year operations and without accounted 2 new buidldings (building for the elderly and a building for low-income families).

Assumptions/notes on each PAI's:

PAI 1 The slight increase in oil no. 2 consumption in 2017 is due to the biomass boiler temporarily being out of order.

CF 0306

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Swicht fuel from oil no.2 to wood pellets and electricity**	
Inputs (*original name in french*)	Conversion du Mazout vers l'Electricité et la biomasse	
Baseline emissions (tCO_2e)	1642,924236	1642,92
Project emissions (tCO_2e)	5,962629	5,96
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	1636,961607	**1636,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no. 2 consumption	
Data in	**600 761,55**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	1642,9	
Projects emissions (tCO_2e)		
Description *55% remplacé par wood pallets*	Biomass consumption	
Data in	**658,79**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,023694	
Projects emissions (tCO_2e)		
Description *45% remplacé par électricit é*	Electricity consumption	
Data in	**2 911 242,49**	
EF used (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	5,938935	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	34	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0306
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2014	2 277,30	
2	*Evidence provided by client's facility*	Confidential	*L*	*Évapo électrique*	2013	20 841,60	
4	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule/élec*	2014	14 548,00	
5	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2014	16 814,60	
6	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2014	12 240,00	
7	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2014	15 728,00	
8	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2015	20 841,60	
9	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2014	19 626,90	
10	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2015/2018	35 484,17	
11	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2014	48 144,77	
12	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2014	25 811,86	
13	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2014	33 073,57	
14	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2016	16 116,73	
15	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2016	26 087,24	
16	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2016	8 101,68	
17	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2015	8 262,30	
18	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2015	11 288,53	
19	*Evidence provided by client's facility*	Confidential	*L*	*Super concentrateur*	2016	13 111,87	
20	*Evidence provided by client's facility*	Confidential	*L*	*Hyper Brix*	2016	22 772,00	
21	*Evidence provided by client's facility*	Confidential	*L*	*Hyper Brix*	2016	12 244,38	
22	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2016	22 399,63	
24	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2017	8 731,53	
25	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2016	12 088,08	
27	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2016	4 600,00	
28	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2017	12 344,80	
29	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2018	14 738,23	
31	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2018	7 413,00	
32	*Evidence provided by client's facility*	Confidential	*L*	*Hyper Brix*	2018	23 561,03	
33	*Evidence provided by client's facility*	Confidential	*L*	*Biomasse fores. Résiduel*	2017	21 565,97	
34	*Evidence provided by client's facility*	Confidential	*L*	*Super concentrateur*	2018	6 549,60	
35	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Granule*	2019	23 640,93	
36	*Evidence provided by client's facility*	Confidential	*L*	*Chauffage Granule*	2018	25 816,00	
37	*Evidence provided by client's facility*	Confidential	*L*	*Évapo Électrique*	2018	15 064,67	
56	*Evidence provided by client's facility*	Confidential	*L*	*Chauffage Granule*	2015	18 831,00	
57	*Evidence provided by client's facility*	Confidential	*L*	*Évaporateur électrique*	2020		
58	*Evidence provided by client's facility*	Confidential	*L*	*Évaporateur bois/granules*	2020		
59	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2020		
60	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2020		
61	*Evidence provided by client's facility*	Confidential	*L*	*Ligne électrique*	2020		
	Evidence provided by client's facility	Confidential	*L*	*Évaporateur aux granules*	2020		
	Evidence provided by client's facility	Confidential	*L*	*Ligne électrique*	2020		
	TOTAL					600 761,55	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI	*Maximum yearly biomass consumption (wood pellets) per individual PAI (sugar shack), is not exceeding the equivalent of 56,000 liters which is* ***112*** *Mt of wood pellets. This volume represents less than 0,004 tCO_2e, which we considered non significative.*	112	0,0040
PAI	*Maximum yearly biomass electricity per individual PAI (sugar shack), is not exceeding the equivalent of 27 000 liters which is* ***288 750*** *KWhours. This volume represents less than 0,589 tCO_2e, which we considered non significative.*	288 750	0,5891
Gen	*The average electrcity consumption per sugar shack is not exceeding 490 180 KWH/year (which generated in Quebec 1 tCO_2e)*	490 180,0	1,0000

Included in the 5th Monitoring period

		%	Équivalent GJ	Équivalent unité
% en électrique		45,3%	2 911 242	*Kwh*
% en biomasse		54,7%	659	*Mt (biomass pellets)*

38,5 MJ/liters of fuel oil
3,6 MJ/kWh
19,2 MJ/kg

CF 0307

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Conversion of propane to biomass**	
Inputs (*original name in french*)	Conversion du propane vers la biomasse	
Baseline emissions (tCO_2e)	24,261771	24,26
Project emissions (tCO_2e)	19,640910	19,64
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	4,620861	**4,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Propane consumption before PAI	
Data in	**15 713,75**	
EF (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	24,261771	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in	**274 684,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,560355	
Projects emissions (tCO_2e)		
Description	Propane consumption after PAI	
Data in	**12 358,00**	
EF used (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	19,080554	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0307
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2012	Others
1	Evidence provided client's facility	Annual propane consumption	L		2012	12 358,00	11 509,00	Project
	Will's calculations	Baseline propane consumption adjustments	L	new adjusted baseline emission		15 713,75		Baseline
	Evidence provided client's facility	Annual electricity consumption	Kwh		2012	274 684,00	165 330,00	Project
	Evidence provided client's facility	Cheese production	kg			91 362,00	66 915	
	Will's calculations	Baseline propane consumption adjustments				24 447,00		
	Will's calculations		%	increase in operations/cheese production		37%		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Operations have increased, for both 2017 and 2018, of about 20%.

PAI There was issues with the methanisor between June 2017 and September 2017.

Note : Decrease in activities of **10%** due to the Covid 19 pandemic

CF 0308

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	**1**	**2**	
Inputs (english)	**Conversion of oil no. 2 to geothermal system**	**Oil consumption reduction by geothermal transfer**	
Inputs (*original name in french*)	Conversion de l'huile no. 2 ver la géothermie	Reduction de consom. d'huile par transfert d'énergie de géothermie	
Baseline emissions (tCO_2e)	38,461327	19,541877	58,00
Project emissions (tCO_2e)	0,674179	4,670929	5,35
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	37,787148	14,870947	**52,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Church oil consumption	Presbytery oil consumption	
Data in	**14 064,00**	**7 145,80**	
EF (tCO2e/Metric tons)	0,002735	0,002735	
Equation: result in tCO_2e	38,461327	19,541877	
Projects emissions (tCO_2e)			
Description	Electricity consumption	Presbytery oil consumption	
Data in	**330 480,00**	**1 708,00**	
EF (tCO2e/Metric tons)	0,000002	0,002735	
Equation: result in tCO_2e	0,674179	4,670929	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VIII	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0308
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Others
1 - 2	**Evidence provided by the client's facility**	**Annual oil no.2 consumption**	***L***	*Church consumption only*	2009												**14 064,00**		
1 - 2	**Evidence provided by the client's facility**	**Annual oil no.2 consumption**	**L**	Presbytery consumption only	2009	2 241,10	**1 708,00**	1 158,20	2 975,00	572,00	1 927,00	1 881,00	2 000,00	2 000,00	6 203,00	3 447,80	**7 145,80**		
3	**Evidence provided by the client's facility**	**Annual electricity consumption**	***Kwh***	Electricity of geothermal system	2011	315 000,00	**330 480,00**	165 870,00	141 660,00	150 930,00	164 430,00	171 900,00	129 420,00	141 930,00	105 660,00	203 580,00	71 460,00	40 950,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 There is no oil no.2 consumption for the church from 2010 onwards because the full conversion to a geothermal system happened in 2010.

Note : Decrease in activities of **30%** (2019) et **20%** (2020)

CF 0309

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Switch fuel to urban biomass**	
Inputs (*original name in french*)	Utilisation de biomasse urbaine pour chauffage écocentre	
Baseline emissions (tCO_2e)	10,910531	10,91
Project emissions (tCO_2e)	0,000288	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	10,910243	**10,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	equivalent oil consumption	
Data in	**3 989,61**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	10,910531	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**8,00**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,000288	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Composting of organic waste**	**Urban biomass diverted from landfill**	
Inputs (*original name in french*)	Collecte et compostage des matières organiques	Détournement de biomasse urbaine	
Baseline emissions (tCO_2e)	181,898732	0,000000	181,90
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	181,898732	0,000000	**181,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Organic waste diverted from landfill by composting	Urban biomass diverted from landfill	
Data in Metric tons (Mt)	**323,31**	**0,00**	
EF (tCO2e/Metric tons)	0,562614	0,000000	
Equation: result in tCO_2e	181,898732	0,000000	
Projects emissions (tCO_2e)			
Description	Landfill diversion	Landfill diversion	
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0309
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client facility	Biomass used for heating	*Mt*		2014	8,00	Project
	Will's calculations	Equivalent oil consumption	L			3 989,61	Baseline

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 19,2 Mj/kg of biomass
38,5 MJ/Litre of oil

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client facility	Organic wastes diverted from landfi	Mt	*Collecte initiée en 2015*	2015	323,31	
2	Evidence provided by client facility	Urban biomass	Mt	PGMR report p.39	2009	0,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1- Notes about the collection of organic matter. The GHG reduction component regarding diversion from landfill (baseline landfill) belongs to the Client facility (MRC), without evidence to the contrary of SEMER. See MRC PGMR p. 27-30.

CF 0403

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**2**	
Inputs (english)	**Switch fuel propane to biomass**	
Inputs (*original name in french*)	Conversion propane vers biomasse	
Baseline emissions (tCO_2e)	272,258419	272,26
Project emissions (tCO_2e)	0,013572	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	272,244847	**272,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Propane consumption	
Data in Liters (L)	**176 335,00**	
EF (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	272,25842	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in Liters (L)	**377,36**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,013572	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13	Sous-total
PAI	**1**	
Inputs (english)	**Landfill avoidance of organic waste**	
Inputs (*original name in french*)	Revalorisation des matières organiques	
Baseline emissions (tCO_2e)	70,563048	70,56
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	70,563048	**70,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Organic waste composted and diverted from landfill	
Data in Metric tons (Mt)	**125,42**	
EF (tCO2e/Metric tons)	0,562614	
Equation: result in tCO_2e	70,563048	
Projects emissions (tCO_2e)		
Description	Food valorization	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0403
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2013	Others
1-2	Evidence provided by client's facility	Propane consumption	*L*		2013	0,00	*176 335,00*	*Baseline in blue*
2	Evidence provided by client's facility	Biomass consumption	Mt			377,36		Project

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 Conversion of the propane dryer to a biomass dryer in 2017.

PAI 1 As a conservative approach, propane consumption for 2016 and 2017 is equivalent to 2015 (despite the decreasing tendency).

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2013	Others
1	Evidence provided by the client facilit	Delivered biomass	*Mt*	*Food valorization*	2009	*125,42*	*320,22*	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0404
Traceability realized on each micro-project

2019	Scope 3														Sous-total
PAI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Inputs (english)	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	
Inputs (*original name in french*)	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	Confidential	
Baseline emissions (tCO_2e)	87,822445	68,136310	62,523736	309,371861	357,094653	33,759059	72,339890	66,216269	41,803743	93,338742	67,474518	43,615232	57,275430	24,840211	1385,61
Project emissions (tCO_2e)	0,968429	0,636480	0,653983	2,594880	4,606524	0,386356	0,966470	0,622037	0,449453	0,641743	0,433296	0,371362	0,604258	0,380786	14,32
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	86,854017	67,499830	61,869753	306,776981	352,488129	33,372703	71,373420	65,594233	41,354290	92,696998	67,041222	43,243870	56,671172	24,459424	**1371,00**
Baseline emissions (tCO_2e)															
Baseline scenario description	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	Oil equivalent consumption	
Data in	32 113,68	24 915,13	22 862,81	113 126,77	130 577,38	12 344,54	26 452,24	24 213,04	15 286,21	34 130,81	24 673,14	15 948,61	20 943,68	9 083,22	
EF (tCO2e/Metric tons)	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	
Equation: result in tCO_2e	87,822445	68,136310	62,523736	309,371861	357,094653	33,759059	72,339890	66,216269	41,803743	93,338742	67,474518	43,615232	57,275430	24,840211	
Projects emissions (tCO_2e)															
Description	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	Electricity consumption	
Data in	474 720,00	312 000,00	320 580,00	1 272 000,00	2 258 100,00	189 390,00	473 760,00	304 920,00	220 320,00	314 580,00	212 400,00	182 040,00	296 205,00	186 660,00	
EF used (tCO2e/Metric tons)	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	
Equation: result in tCO_2e	0,968429	0,636480	0,653983	2,594880	4,606524	0,386356	0,966470	0,622037	0,449453	0,641743	0,433296	0,371362	0,604258	0,380786	
Source of Emission Factor (EF)	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	MERN 2019	
Sectoral scope	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	
Number of PAI attributed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

CF 0404
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Kam	RdL	Baseline	2019	Others
1	Evidence provided by client's facility	Oil consumption equivalent	*L*	*Confidential*			2013	*32 114*	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				474 720	Project
2	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2014	24 915	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				312 000	Project
3	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2010	22 863	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				320 580	Project
4	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2012	113 127	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				1 272 000	Project
5	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2015	130 577	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				2 258 100	Project
6	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2015	12 345	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				189 390	Project
7	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2013	26 452	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				473 760	Project
8	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2013	24 213	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				304 920	Project
9	Evidence provided by client's facility	Oil consumption equivalent	L	Confidential			2012	15 286	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				220 320	Project
10	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2012	34 131	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				314 580	Project
11	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2012	24 673	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				212 400	Project
12	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2012	15 949	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				182 040	Project
13	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2013	20 944	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				296 205	Project
14	Evidence provided by client's facility	Oil consumption equivalent	L	*Confidential*			2014	9 083	*Baseline*
	Evidence provided by client's facility	Electricity consumption	kWh	Confidential				186 660	Project
								506 671	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

7 017 675

Assumptions/notes on each PAI's:

PAI The GHG reductions are accounted only (with a very conservative approach) at the year of the installation of geothermal (instead to support oil consumption) instead of the year of the change of the bi-energy program

Bi énergie 50% mazout et 50% électricité 50% 3,6 Mj/KWh

38,5 Mj/litre

Average electricity consumption per building 489 234,6

CF 0502

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Switch fuel from oil to biomass**	
Inputs (*original name in french*)	Conversion du mazout à la biomasse	
Baseline emissions (tCO_2e)	636,351189	636,35
Project emissions (tCO_2e)	7,631142	7,63
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	628,720047	**628,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Mazout consumption	
Data in Liter	**232 692,00**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	636,351189	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in Metric tons	**843,95**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,030354	
Projects emissions (tCO_2e)		
Description	Mazout consumption after PAI	
Data in Liters	**2 779,35**	
EF used (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	7,600789	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0502
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2011	Others
1	Evidence provided by client's facility	Oil no. 2 consumption	*L*		2011	2 779,35	*232 692,00*	*Baseline in blue* *Project in red*
	Evidence provided by client's facility	Biomass consumption	Mt	kg converted in Mt	2011	843,95	0,00	Project

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0504

Traceability realized on each micro-project

2019	Scope 3				Sous-total
PAI	1	2	3	4	
Inputs (english)	**Switch fuel oil to electricity (City Hall)**	**Switch fuel oil to heat pumps (old arena)**	**Switch fuel oil to propane (Casernel)**	**New design with heat recovery and electricity (new arena)**	
Inputs (*original name in french*)	Conversion chauffage huile vers électricité (Hotel de Ville)	Conversion chauffage huile vers propane (Vieil Aréna)	Conversion chauffage huile no. 2 vers propane (Caserne)	Nouveau design récupération de chaleur et électricité (Nouvel Aréna)	
Baseline emissions (tCO_2e)	75,042797	27,188472	11,247258	349,205188	462,68
Project emissions (tCO_2e)	16,787625	0,419587	9,123401	2,785824	29,12
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	58,255171	26,768885	2,123857	346,419364	**433,00**
Baseline emissions (tCO_2e)					
Baseline scenario description	consumption oil no.2	consumption oil no.2	consumption oil no.2	equivalent oil consumption	
Data in	**27 440,60**	**9 941,90**	**4 112,74**	**127 692,47**	
EF (tCO2e/Metric tons)	0,002735	0,002735	0,002735	0,002735	
Equation: result in tCO_2e	75,042797	27,188472	11,247258	349,205188	
Projects emissions (tCO_2e)					
Description	consumption of electricity	consumption of electricity	propane consumption	consumption of electricity	
Data in	**409 760,00**	**205 680,00**	**5 909,00**	**1 365 600,00**	
EF (tCO2e/Metric tons)	0,000002	0,000002	0,001544	0,000002	
Equation: result in tCO_2e	0,835910	0,419587	9,123401	2,785824	
Projects emissions (tCO_2e)					
Description	Consumption of oil after PAI	-	-	-	
Data in	**5 833,00**	**0,00**	**0,00**	**0,00**	
EF used (tCO2e/Metric tons)	0,002735	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	15,951715	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VIII	PAI X	PAI V-X	
Number of PAI attributed	1	1	1	2	
Ownership	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	

2019	Scope 13			Sous-total
PAI	1	2	3	
Inputs (english)	**Recycling paper/cardboard from select. Collection**	**Composting organic waste (LaPocatière)**	**Composting organic waste (SEMER)**	
Inputs (*original name in french*)	Recyclage de papier/carton de la collecte sélective	Compostage municipal des matières organiques	Compostage des matières organiques à la SEMER	
Baseline emissions (tCO_2e)	1995,040516	0,000000	149,438253	2144,48
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	1995,040516	0,000000	149,438253	**2144,00**
Baseline emissions (tCO_2e)				
Baseline scenario description	Paper/cardboard recycled and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	
Data in Metric tons (Mt)	**507,11**	**0,00**	**218,72**	
EF (tCO2e/Metric tons)	3,934140	0,000000	0,683240	
Equation: result in tCO_2e	1995,040516	0,000000	149,438253	
Projects emissions (tCO_2e)				
Description				
Data in Metric tons (Mt)	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	
Projects emissions (tCO_2e)				
Description	-	-	-	
Data in Metric tons (Mt)	**0,00**	**0,00**	**0,00**	
EF used (tCO2e/Metric tons)	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**WARM version 15, November 2020**	**WARM version 15, November 2020**	**WARM version 15, November 2020**	
Sectoral scope	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	
Number of PAI attributed	1	1	1	
Ownership	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	

CF 0504
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2018	2017	2016	2015	2014	2009	Others
1	Evidence provided by the municipality	City Hall oil consumption	*L*		2015	5 833,00		0,00	*0,00*	27 440,60			*Baseline in blue Project in red*
	Evidence provided by the municipality	Electricity consumption	*KWh*			409 760,00	379 080,00	168 120,00	325 480,00	125 850,00	46 695,00		Project
2	Evidence provided by the municipality	Old arena oil consumption	*L*		2014	0,00	0,00	0,00	0,00	0,00	9 941,90		Baseline in blue
	Evidence provided by the municipality	Electricity consumption	*KWh*			205 680,00	216 960,00	215 280,00	242 640,00	268 320,00			Project
3	Evidence provided by the municipality	Fire station propane consumption	*L*		2009	5 909,00	4 402,00	4 993,00	4 220,00			4 112,74	*Baseline in blue Project in red*
4	Evidence provided by the municipality	Nouvel aréna electricity consumption	*KWh*		2011	1 365 600,00	1 378 800,00	1 402 800,00	1 497 600,00	1 562 400,00	1 658 400,00		Project
	Evidence provided by the municipality	Nouvel aréna energy used equivalent oil	*MJ*			4 916 160,00	4 963 680,00	5 050 080,00	5 391 360,00	5 624 640,00	5 970 240,00		
	Evidence provided by the municipality	Nouvel aréna equivalent oil	*L*			127 692,47	128 926,75	131 170,91	140 035,32	146 094,55	155 071,17		Project

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 3	150%	Estimate of heating volume following the extension of the fire station.

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2018	2017	2016	2015	2014	2009	Others
1	Evidence provided by the municipality	Paper/cardboard recuperated and sent to recycli	*Mt*	*From municipal report (Recyc-Québec)*	2009	507,11	489,74	*484,39*	*472,00*	*439,77*	*471,97*		
2	Evidence provided by the municipality	Organic waste composted at the City platform	*Mt*	Composting at city platform (transfered to SEMER in 2015)	2009	0,00	0,00	0,00	0,00	0,00	0,00		
3	Evidence provided by the municipality	Organic waste composted at the SEMER	*Mt*	Composting at SEMER	2009	218,72	195,60	201,80	197,03	179,90	0,00		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1	71%	**of recycling paper/carton inside collecte sélective from Recyc Quebec for 2017 and 2018.**
	74%	% of recycling paper/carton inside collecte sélective from Recyc Quebec for 2012, 2013 and 2014
	75%	% of recycling paper/carton inside collecte sélective from Recyc Quebec for 2010 and 2011

CF 0507

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Switch fuel oil to geothermal system**	
Inputs (*original name in french*)	Conversion huile vers la géothermie	
Baseline emissions (tCO_2e)	36,747038	36,75
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	36,747038	**36,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Equivalent oil consumption	
Data in	13 437,14	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	36,747038	
Projects emissions (tCO_2e)		
Description	Oil consumption	
Data in	0,00	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13								Sous-total
PAI	1	2	3	4	5	6	7	8	
Inputs (english)	**Urban biomass reused**	**Organic wastes from a group of 7 Municipalities**	**Organic wastes from a group of 4 Municipalities**	**Organic wastes from 1 municipality**	**Organic wastes from 1 municipality**	**Organic wastes from 1 municipality**	**Organic wastes from 1 municipality**	**Organic wastes from 1 municipality**	
Inputs (*original name in french*)	Biomasse urbaine récupérée et déchiquettée	Matières organiques de 7 municipalités	Matières organiques de 4 municipalités	Matières organiques d'une municipalité	Matières organiques d'une municipalité	Matières organiques d'une municipalité	Matières organiques d'une municipalité	Matières organiques d'une municipalité	
Baseline emissions (tCO_2e)	713,899624	191,307200	69,109726	32,378744	11,437438	3,839809	36,498681	30,445174	1088,92
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	713,899624	191,307200	69,109726	32,378744	11,437438	3,839809	36,498681	30,445174	**1088,00**
Baseline emissions (tCO_2e)									
Baseline scenario description	Urban biomass reused and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	Organic waste composted and avoided from landfill	
Data in Metric tons (Mt)	399,89	280,00	101,15	47,39	16,74	5,62	53,42	44,56	
EF (tCO2e/Metric tons)	1,785240	0,683240	0,683240	0,683240	0,683240	0,683240	0,683240	0,683240	
Equation: result in tCO_2e	713,899624	191,307200	69,109726	32,378744	11,437438	3,839809	36,498681	30,445174	
Projects emissions (tCO_2e)									
Description									
Data in Metric tons (Mt)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM November 2020**	**USEPA WARM November 2020**	**USEPA WARM November 2020**	**USEPA WARM November 2020**	**USEPA WARM November 2020**	**USEPA WARM November 2020**	**USEPA WARM November 2020**	**USEPA WARM November 2020**	
Sectoral scope	13	13	13	13	13	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	
Number of PAI attributed	1	7	4	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

CF 0507
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	Others
1	Evidence provided by client's facility	oil comsumption reference	*L*	*Document from WSP , page 24 Tableau 4-1*	2014	*0,00*	*4 703,00*	*Project*
2	Evidence provided by client's facility	% of energy reduction with the geothermal system	%	PowerPoint slide 10	2015		65%	
3	Will's calculations	equivalent oil consumption	L				13 437	Baseline
8								

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Consommation énergétique de 5,6 KWh/p2 réduction de 65% par rapport au CMNEB

PAI

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	Others
1	Evidence provided by client's facility	Urban biomass recuperated and reused	*Mt*		2006	***399,89***	*174,88*	
2	Evidence provided by client's facility	Organic wastes from a group of 7 municipalities	Mt		2014	**280,00**	0,00	
3	Evidence provided by client's facility	Organic wastes from a group of 4 municipalities	Mt		2014	**101,15**	0,00	
4	Evidence provided by client's facility	Organic wastes from municipality	Mt		2014	**47,39**	0,00	
5	Evidence provided by client's facility	Organic wastes from municipality	Mt		2014	**16,74**	0,00	
6	Evidence provided by client's facility	Organic wastes from municipality	Mt		2014	**5,62**	0,00	
7	Evidence provided by client's facility	Organic wastes from municipality	Mt		2014	**53,42**	0,00	
8	Evidence provided by client's facility	Organic wastes from municipality	Mt		2014	**44,56**	0,00	
						#REF!		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI On all 8 PAI, the MRC (Clients's facility) showed enough evidence of the property of its GHG reductions

PAI

CF 0508

Traceability realized on each micro-project

1000000

2019	Scope 3						Sous-total
PAI	1	2	3	4	5	6	
Inputs (english)	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	Swich fuel oil to geothermal system	
Inputs (*original name in french*)	Church	Church	Church	Church	Church	Church	
Baseline emissions (tCO_2e)	52,537013	15,680976	23,611711	23,647262	20,901587	28,791301	165,17
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	52,537013	15,680976	23,611711	23,647262	20,901587	28,791301	**165,00**
Baseline emissions (tCO_2e)							
Baseline scenario description	Oil consumption	Oil consumption	Oil consumption	Oil consumption	Oil consumption	Oil consumption	
Data in	**19 211,00**	**5 734,00**	**8 634,00**	**8 647,00**	**7 643,00**	**10 528,00**	
EF (tCO2e/Metric tons)	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	
Equation: result in tCO_2e	52,537013	15,680976	23,611711	23,647262	20,901587	28,791301	
Projects emissions (tCO_2e)							
Description	Oil consumption	Oil consumption	Oil consumption	Oil consumption	Oil consumption	Oil consumption	
Data in	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,002735	0,002735	0,002735	0,002735	0,002735	0,002735	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	PAI VIII	
Number of PAI attributed	1	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	n.a.	N.a.	

CF 0508
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2009	2008	2007	
1	Evidence provided by client's facility	Oil consumption	*L*	*Church*	2004	*0,00*	*1 433,00*	*9 958,00*	***19 211,00***	Baseline
	Evidence provided by client's facility	Electricity consumption	KWh			**211 800,00**	225 134,00	107 880,00	180 960,00	Project
2	Evidence provided by client's facility	Oil consumption	L	*Church*	2007	0,00	0,00	**5 734,00**		Baseline
	Evidence provided by client's facility	Electricity consumption	KWh			**210 960,00**				Project
3	Evidence provided by client's facility	Oil consumption	L	*Church*	2009	0,00	**8 634,00**			Baseline
	Evidence provided by client's facility	Electricity consumption	KWh							
4	Evidence provided by client's facility	Oil consumption	L	*Church*	2009	0,00	**8 647,00**			Baseline
	Evidence provided by client's facility	Electricity consumption	KWh							
5	Evidence provided by client's facility	Oil consumption	L	*Church*	2009	0,00	**7 643,00**			Baseline
	Evidence provided by client's facility	Electricity consumption	KWh							
6	Evidence provided by client's facility	Oil consumption	L	*Church*	2009	0,00	**10 528,00**			Baseline
	Evidence provided by client's facility	Electricity consumption								

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0512

Traceability realized on each micro-project

2019	Scope 13	Sous-total
PAI	**1**	
Inputs (english)	**Shredded paper for recycling**	
Inputs (*original name in french*)	Papiers déchiquetés pour recyclage	
Baseline emissions (tCO_2e)	808,406758	808,41
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	808,406758	**808,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Shredded paper recycled and avoided from landfill	
Data in	**205,49**	
EF (tCO2e/Metric tons)	3,934140	
Equation: result in tCO_2e	808,406758	
Projects emissions (tCO_2e)		
Description		
Data in	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM version 15, 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0512
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019
1	Evidence provided by client facility	Paper collected for recycling	*Mt*		2004	205,49

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI The client mentions a decrease of more or less 15% in its activities due to COVID-19 in 2020.

PAI

CF 0601

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	1	2	
Inputs (english)	**Conversion of natural gas to biomass**	**Coverting propane to electricity**	
Inputs (*original name in french*)	Conversion du chauffage de 9 séchoirs du gaz naturel vers la biomasse	Conversion des chariots du propane à l'électricité	
Baseline emissions (tCO_2e)	2483,277251	27,012000	2510,29
Project emissions (tCO_2e)	93,392713	0,000000	93,39
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	2389,884538	27,012000	**2416,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Natural gas consumption	Propane consumption	
Data in	**1 314 376,20**	**17 495,00**	
EF (tCO2e/Metric tons)	0,001889	0,001544	
Equation: result in tCO_2e	2483,277251	27,012000	
Projects emissions (tCO_2e)			
Description	Biomass consumption	Propane consumption	
Data in	**2 596 694,45**	**0,00**	
EF (tCO2e/Metric tons)	0,000036	0,001544	
Equation: result in tCO_2e	93,392713	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	PAI VIII	
Number of PAI attributed	9	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	**Diversion of wood residues and shavings from landfill**	
Inputs (*original name in french*)	Détournement des résidus (ripes) de l'enfouissement	
Baseline emissions (tCO_2e)	10143,733680	10143,73
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	10143,733680	**10143,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Biomass diverted from landfill	
Data in Metric tons (Mt)	**5682,00**	
EF (tCO2e/Metric tons)	1,785240	
Equation: result in tCO_2e	10143,733680	
Projects emissions (tCO_2e)		
Description		
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM November 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0601
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	**Evidence provided by client's facility**	Biomass consumption	*kg*	*see assumptions*	2013	2 596 694,5	
	Will's calculations	Biomass calorific value	kWh			13 840 381,4	5,33
	Will's calculations	**Equivalent in natural gas**	**m3**	**Baseline data**	**2013**	**1 314 376,2**	**10,53**
	Yearly output		1000sq2			7 040	
	Intensity production factor		%			103,87%	
2	**Evidence provided by client's facility**	Propane consumption (baseline)	L	Forklifts	2015	17 495,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 Client Facility's choice to operate with biomass is not a common practice in the industry. Its competitors in the same region use natural gas to dry their wood;
Average of biomass used by the boiler is 2 500 Mt (at 7% dry) and it is totally supplied by internal biomass residues from the Client Facility operations.
We assume the same combustion efficiency of the equipement of natural gas and the biomass boiler at 85%. We did not adjust the intensity of production because it is reflected into the energy consumption (increase) used at the input.
The yearly volume from 2010 to 2012 is then adjusted with intensity production factor of the 2010, 2011 and 2012 year.

PAI 2 The conversion of forklifts occured on May 2016

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	**Evidence provided by client's facility**	Wood shavings (biomass residues)	*Mt*		2009	5 682,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 3 The average of wood shaving residues that are diverted from landfill from 2010 to 2012 is calculated (average of the cumulative years 2013-2018): 3 109,46 Mt (160 trucks/year with 19.434 tons of biomass/truck).
The yearly volume from 2010 to 2012 is then adjusted with intensity production factor of the 2010, 2011 and 2012 year.

CF 0602

Traceability realized on each micro-project

2019	Scope 3			Sous-total
PAI	**1**	**2**	**3**	
Inputs (english)	**Switch fuel from oil to natural gaz**	**Heat recovering**	**Energy conservation**	
Inputs (*original name in french*)	Conversion mazout vers gaz naturel	Récupération de chaleur	Récupération énergétique par le recyclage de résidus de verres	
Baseline emissions (tCO_2e)	335,386504	0,000000	1364,466808	1699,85
Project emissions (tCO_2e)	200,521618	0,000000	0,000000	200,52
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	134,864886	0,000000	1364,466808	**1499,00**
Baseline emissions (tCO_2e)				
Baseline scenario description	Fuel Oil no. 2 consumption	Fuel Oil no. 2 consumption	Fuel Oil no. 2 consumption	
Data in	**6 301,09**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,002735	0,001889	0,001889	
Equation: result in tCO_2e	17,231809	0,000000	0,000000	
Baseline emissions (tCO_2e)				
Baseline scenario description	Natural gas consumption	Natural gas consumption	Natural gas consumption	
Data in	**168 396,40**	**0,00**	**722 199,95**	
EF (tCO2e/Metric tons)	0,001889	0,001889	0,001889	
Equation: result in tCO_2e	318,154694	0,000000	1364,466808	
Projects emissions (tCO_2e)				
Description	Natural gas consumption	Natutal gas consumption	Natutal gas consumption	
Data in	**106 134,28**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,001889	0,001889	0,001889	
Equation: result in tCO_2e	200,521618	0,000000	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI V	PAI IX	
Number of PAI attributed	1	1	1	
Ownership	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	

CF 0602
Ground Data Supply

SCOPE 3: Energy Efficiency

Variables used for calculations		
37,89	4600	2204

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2013	2012	2011	2010	2009	2008	Others
1	Evidence provided by client's facility	oil no. 2 consumption	$		2011				5 797	2 525	2 490		
1	Régie de l'énergie du Québec Document 1998-2018 (pricing for Quebec Capitale-nationale in january of each year)	average unit price/liter	$/L	http://www.regie-energie.qc.ca/energie/archives/graphiques/mazout_graph_historique2018.pdf					0,92 $	0,78 $	0,72 $		
1	**Will's calculations**	**oil no. 2 consumption**	***L***	Baseline scenario					**6 301**	3 237	3 458		
1	**Evidence provided by client's facility**	**natural gas consumption**	**M^3**	***plant 1***		**106 134,28**	59 987	50 926	**124 398**				**59,6%**
2	**Evidence provided by client's facility**	**natural gas consumption**	**M^3**	***plant 2***		**18 144,72**	24 807	34 517	**0**	**0**	**0**		**40,4%**
1	Will's calculations	Intensity production	%	rf. Year 2011 = 100%	2011	149,4%	121,4%	108,5%	100,0%	81,3%	86,8%		
1	Will's calculations	natural gas consumtion adjusted with production	M^3	Baseline scenario	2011	**185 865**	151 056	135 018	124 398				
3	Evidence provided by client's facility	residues of glass sent to recycling	Mt			2 218	1 285	1 216	1 030				
3	Evidence provided by client's facility	production output	Mt			5 949	4 835	4 321	3 981	3 164	2 835		
3	Will's calculations	Energy saving in MJ	MJ	With 4600 MJ/Mt	2010	27 364 156	22 239 330	19 878 213	18 314 633	14 555 936	13 042 380		
3	**Will's calculations**	**Equivalent natural gas saved by recycling the glass residus**	**m^3**	**37,89MJ/M^3** ***(ref MERN)*** Baseline scenario		**722 200**	586 945	524 630	**483 363**	**384 163**			

Number in red are used in the yearly spreadsheet GHG's calculations

Assumptions/notes on each PAI's:

PAI 2 *Repartition of natural gas consumption for 2010 up to 2015 between plant 1 and 2:* ***Plant 1*** 59,60% ***Plant2***

PAI 2 *Repartition (plant 1 and 2) on natural gas consumption is modified in 2016 to* ***Plant 1*** 90,60% ***Plant2***

Repartition on natural gas consumption ratio of 2020 is estimated by the client as ***Plant 1*** 88,00% ***Plant 2***

PAI 3 *Energy saving by using waste glass post production in a new production (recycling). Using 4600 MegaJoules/Mt of galss residus Page 4* *https://www.astm.org/CERTIFICATION/DOCS/374.EPD_for_2017015_Vitro_EPD_Flat_9.28.17.pdf*

CF 0604

Traceability realized on each micro-project

2019	Scope 3						Sous-total
PAI	1	2	3	4	5	6	
Inputs (english)	**Switch fuel from coke to residues**	**Energy efficiency dehumififier**	**Energy efficiency measures for cubelo**	**Energy efficiency measures for cubelo (casting)**	**Switch fuel oil to propane**	**Switch fuel coke to electricity**	
Inputs (*original name in french*)	Conversion coke vers résidus brasques Plant 1	Nouveau déshumidificateur Plant 1	Modification cubelo; mesures en EE Plant 1	Modification noyau du casting; mesures en EE - Plant 1	Plant 2 - conversion mazout vers propane (bâtiment)	Plant 2 - conversion du cubelo du coke vers électricité	
Baseline emissions (tCO_2e)	10730,623042	2376,850636	80,755185	730,703489	378,755804	4348,267464	18645,96
Project emissions (tCO_2e)	5097,280319	0,000000	0,000000	0,000000	261,363001	902,688616	6261,33
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	5633,342723	2376,850636	80,755185	730,703489	117,392803	3445,578849	**12384,00**
Baseline emissions (tCO_2e)							
Baseline scenario description	Coke consumption	Natural gas adjusted consumption	Natural gas adjusted consumption	Natural gas adjusted consumption	Oil consumption	Coke consumption	
in metric ton	**4 314,98**	**1 258 045,56**	**42 742,99**	**386 754,75**	**138 498,12**	**1 394,69**	
EF (tCO2e/Metric tons)	2,486830	0,001889	0,001889	0,001889	0,002735	2,486830	
Equation: result in tCO_2e	10730,623042	2376,850636	80,755185	730,703489	378,755804	3468,363946	
Baseline emissions (tCO_2e)							
Baseline scenario description	-	-	-	-	-	Propane consumption (prod. 2015)	
Data in	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**569 891,60**	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,001544	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	879,903519	
Projects emissions (tCO_2e)							
Description	Coke consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Propane consumption	Propane consumption	
Data in	**2 049,71**	**0,00**	**0,00**	**0,00**	**169 278,31**	**569 891,60**	
EF (tCO2e/Metric tons)	2,486830	0,000000	0,000000	0,000000	0,001544	0,001544	
Equation: result in tCO_2e	5097,280319	0,000000	0,000000	0,000000	261,363001	879,903519	
Projects emissions (tCO_2e)							
Description	-	-	-	-	Oil consumption	Electricity consumption	
Data in	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**11 169 165,00**	
EF used (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000002	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	22,785097	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	PAI VII	PAI VII	PAI VII	PAI VIII	PAI VIII	
Number of PAI attributed	1	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

CF 0604
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2015	2014	2013	2009	2008	Others
1	Evidence provided by client's facility	Volume of coke	*Mt*	Plant 1	2008	**2 049,71**	2 663,0	2 877,0	3 469,0	**3 078,0**	**5 367,00**	
	Evidence provided by client's facility	Production (output) casting	Mt	Plant 1	2008	35 520,00	41 101,6	41 422,9	41 485,2	34 479,9	**44 180,00**	
	Will's calculation	Production increased	%	Plant 1 - ref 2008= 100%	2008	**80%**	**93%**	**94%**	**94%**	**78%**		
	Will's calculation	Volume of coke adjusted (anodes cathode)	Mt	Adjusted with production	2008	**2 475**	**2 864**	**2 886**	**2 890**	**2 402**		
	Will's calculation	Calorific value coke	Mj	Plant 1	2008	71 344 501	82 555 529	83 200 873	83 325 940	69 255 304		
	Will's calculation	Calorific valure natural gaz	Mj	Plant 1	2008	152 882 323	127 565 495	123 444 844	131 995 078	117 853 738		
	Will's calculation	Total calorific value	Mj	Plant 1	2008	224 226 824	210 121 024	206 645 717	215 321 018	187 109 042		
	Will's calculation	repartition coke and natural gaz	%	Plant 1	2008	32%	39%	40%	39%	37%		
	Evidence provided by client's facility	Total natural gaz consumption	M3	Plant 1	2009	**4 034 899,00**	3 366 733	3 257 980	3 483 639	3 110 418		
2	Evidence provided by client's facility	Dehumidifier natural gaz consumption	M3	Plant 1	2013	**1 258 046**	1 235 610	1 237 175	1 717 345	**1 564 765**		
3	Evidence provided by client's facility	Cubelo natural gaz consumption	M3	Plant 1	2009	**42 743**	36 394	30 388	28 502	53 164		
4	Evidence provided by client's facility	Noyau casting natural gaz consumption	M3	Plant 1	2009	**386 755**	377 346	369 206	372 486	481 048		
5	Evidence provided by client's facility	consumption of mazout	L	Plant 2	2013	**0**	0	111 284	**144 852**			
	Will's calculation	Equivalent consumption Propane	L	Plant 2 (Heating)				**169 278**	**220 340**			
	Evidence provided by client's facility	Propane	L	Plant 2 La Perle		463 873,71	765 314	408 196	0			
	Will's calculation	Equivalent consumption Propane	L	Plant 2 (PRODUCTION)		**294 595**	**596 036**	238 918				
	Evidence provided by client's facility	Production (output) casting	Mt	Plant 2		6 910,00	9 248	7 227	9 341			
6	Will's calculation	Production increased	%	2014=100%		96%	128%	100%				
	Evidence provided by client's facility	Volume of equivalent coke	Mt	Plant 2		**1 395**	**819,00**					
	Will's calculation	Equivalent calorific of the electricty consumme	MJ	Plant 2	2016	40 208 994	1 334 880					
	Evidence provided by client's facility	Electricity consumption	*kWh*	Plant 2	2016	**11 169 165**	370 800					

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1

We assume that the anode and cathode residues are used in replacement of coke. Since these residues were processes for their disposal at a thermal destruction facility or they are landfill (with methane emission) , there is no additional GHG emitted from their use at the customer's facility (as projet emission).

Ref 1: https://en.wikipedia.org/wiki/Prebaked_Consumable_Carbon_Anodes

Ref 2: https://books.google.ca/books?id=t-Jg-i0XlpcC&pg=PA79&lpg=PA79&dq=Disposal+sites+for+anodes+aluminium+residues&source=bl&ots=dBG4xZbKBw&sig=oqTylnbNF3YdRklghzwb2ITVGW4&hl=fr&sa=X&ved=2ahUKEwjl9uSWI7neAhXIz1MKHY5RAcs4ChDoATACegQICBAB#v=onepage&q=Disposal%20sites%20for%20anodes%20aluminium%20residues&f=false

Ref 3: https://www.rd-carbon.com/data/documents/publications/raw-materials-carbon-products/anode_plants_for_tomorrow_smelters.pdf

Ref 4 *http://www.bape.gouv.qc.ca/sections/mandats/alcan-brasque/documents/DA6.pdf (enfouisseemnt ou destruction thermique)*

Ref 5 https://www.lesaffaires.com/secteurs-d-activite/general/des-dechets-dangereux-recycles-pour-fabriquer-du-ciment/525178

Ref 6 http://collections.banq.qc.ca/ark:/52327/bs37754

0,909	Mt / tonne net
28,83	Mj/kg coke de charbon
37,89	Mj/M^3 natural gas
3,6	Mj/KWh
38,5	MJ/liters of oil
25,31	Mj/liters of propane

CF 0605

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	**1**	**2**	
Inputs (english)	**Energy efficiency on demand side heating**	**Energy efficiency on demand side equipments**	
Inputs (*original name in french*)	Optimisation (EE) chauffage mazout	Optimisation (EE) essence et diesel (véhicules)	
Baseline emissions (tCO_2e)	431,874705	569,850902	1001,73
Project emissions (tCO_2e)	208,926173	126,043160	334,97
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	222,948532	443,807742	**666,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Oil consumption	Fuel consumption	
Data in	**157 921,90**	**89 469,42**	
EF (tCO2e/Metric tons)	0,002735	0,002790	
Equation: result in tCO_2e	431,874705	249,601162	
Baseline emissions (tCO_2e)			
Baseline scenario description	-	Diesel consumption	
Data in	**0,00**	**114 793,37**	
EF (tCO2e/Metric tons)	0,000000	0,002790	
Equation: result in tCO_2e	0,000000	320,249740	
Projects emissions (tCO_2e)			
Description	Oil consumption	Fuel consumption	
Data in	**76 397,20**	**29 386,40**	
EF (tCO2e/Metric tons)	0,002735	0,002361	
Equation: result in tCO_2e	208,926173	69,387168	
Projects emissions (tCO_2e)			
Description	-	Diesel consumption	
Data in	**0,00**	**20 308,31**	
EF used (tCO2e/Metric tons)	0,000000	0,002790	
Equation: result in tCO_2e	0,000000	56,655992	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VII	PAI VII	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0605
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2011	2010	Others
1	**Evidence provided by client's facility**	Oil no.2 consumption	*L*		**2011**	***76 397,20***	***157 921,90***	*100 304,40*	*Baseline in blue Project in red*
2	**Evidence provided by client's facility**	Fuel consumption	L	Equipment consumption	**2010**	**29 386,40**	77 999,89	**89 469,42**	*Baseline in blue Project in red*
2	**Evidence provided by client's facility**	Diesel consumption	L	Equipment consumption	**2010**	**20 308,31**	83 204,61	**114 793,37**	*Baseline in blue Project in red*
	Will's calculations	Area of greenhouses	M2		2010	11 432,00	11 432,00	**11 432,00**	*Baseline in blue Project in red*
	Will's calculations	Production intensity	%	Reference year 2009	2010	100%	100%	**100%**	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0701

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**New heat pump and improvement of the insulation of the building , resulting in decrease in energy demand for heating**	
Inputs (*original name in french*)	Conversion énergétique	
Baseline emissions (tCO_2e)	7,527429	7,53
Project emissions (tCO_2e)	0,092657	0,09
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	7,434772	**7,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Natural gas consumption	
Data in	**3 984,20**	
EF (tCO2e/Metric tons)	0,001889	
Equation: result in tCO_2e	7,527429	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in	**45 420,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,092657	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0701
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2010	Others
1	Evidence provided by client facility	Natural gaz consumption	*M3*	*Baseline*	2010	*0,00*	3 984,20	
	Evidence provided by client facility	Electricty consumption	KWh	yearly average of electricy consumption	2010	45 420,00	n.a.	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 No major change in the health clinic operation and traffic

PAI

CF 0702

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	1	2	
Inputs (english)	**SPA design to optimize energy consumption**	**Optimization of operations (open hours)**	
Inputs (*original name in french*)	Design d'un SPA pour optimiser la consommation d'énergie	Optimisation des opérations (heures d'ouvertures)	
Baseline emissions (tCO_2e)	375,498417	225,199807	600,70
Project emissions (tCO_2e)	152,526805	222,971612	375,50
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	222,971612	2,228195	**225,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Propane consumption	Original open hours	
Data in liters	**94 352,80**	**0,00**	
EF (tCO2e/Metric tons)	0,001544	0,000000	
Equation: result in tCO_2e	145,678836	225,199807	
Baseline emissions (tCO_2e)			
Baseline scenario description	Biomass consumption	-	
Data in	**190 380,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000036	0,000000	
Equation: result in tCO_2e	6,847969	0,000000	
Baseline emissions (tCO_2e)			
Baseline scenario description	Biomass equivalent	-	
Equation: result in tCO_2e	222,971612	0,000000	
Projects emissions (tCO_2e)			
Description	Propane consumption	Reduced open hours	
#REF!	**94 352,80**	**0,00**	
#REF!	0,001544	0,000000	
Equation: result in tCO_2e	145,678836	222,971612	
Projects emissions (tCO_2e)			
Description	Biomass consumption	-	
#REF!	**190 380,00**	**0,00**	
#REF!	0,000036	0,000000	
Equation: result in tCO_2e	6,847969	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI X	PAI X	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0702
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Data provided by client facility	Propane consumption	*L*		2011	*94 352,80*	
	Data provided by client facility	Wood rope	kg	Unit converted to kg		190 380	
1 & 2	Will's calculation	Equivalent non-emitted GHG from bioma	Mt	see additional calculations sheet		222,97	
	Data provided by client facility	Open days per year	Unit				
	Will's calculation	Intensity adjustment		see additional calculations sheet		225,20	
	Data provided by client facility	Electricity consumption	KWh	Confidential		56 640	
	Data provided by client facility	Electricity consumption	KWh	Confidential		224 280	
	Will's calculation	Electricity consumption	KWh	Total electricity consumption		280 920	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 2,004 kg per wood rope

PAI Installation of electric boilers to reduce propane consumption in Spring 2020.

PAI Based on operational days in 2016, 2017 and 2018, Will assumed 143 day.

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client facility	Composting of organic matter	L	see notes below		0,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 Had to stop composting of organic waste because it was attracting a large number of bears on the site, during open hours.

PAI

ADDITIONAL CALCULATIONS

										1000000						
	2004 kg/Corde de résineux			2		litres	kilogrammes			***Facteur d'émission GES***						
5		2 004		1 000		25 310	19 200			1543,9	35,966					
Année	Nombre de litres de propane consommée	Nombre de corde de bois	Nombre de jours ouverts	Récup. déchets organiques (compostage) en tM 1000 l = 1m^3		Valeur calorifique Propane Kj annuelle	Valeur calorifique Biomasse Kj annuelle	Total valeur calorifique kj annuel	Intensité calorifique: kj/jour	GES propane enTm	GES émis Biomasse enTm	Total GES émis	Équivalent calorifique de la biomasse en litres de propane	Équivalent GES non émis à cause Biomasse	Facteur intensité (productivité optimisation horaire ouverture)	Ajustement intensité
2011	21 875	20	31	0		553 656 250	769 536 000	1 323 192 250	42 683 621	33,8	1,44	35,21	30 404,43	46,94	100,00%	46,9
2012	93 479	92	234			2 365 942 354	3 539 865 600	5 905 807 954	25 238 496	144,3	6,63	150,95	139 860,36	215,93	59,13%	365,2
2013	93 020	92	234			2 354 344 299	3 539 865 600	5 894 209 899	25 188 931	143,6	6,63	150,25	139 860,36	215,93	59,01%	365,9
2014	80 686	80	143	3,84		2 042 172 025	3 078 144 000	5 120 316 025	35 806 406	124,6	5,77	130,34	121 617,70	187,77	83,89%	223,8
2015	85 718	85	143	4,08		2 169 522 580	3 270 528 000	5 440 050 580	38 042 312	132,3	6,13	138,47	129 218,81	199,50	89,13%	223,8
2016	93 440	80	143	0		2 364 966 400	3 078 144 000	5 443 110 400	38 063 709	144,3	5,77	150,03	121 617,70	187,77	89,18%	210,6
2017	94 922	92	143	0		2 402 475 820	3 539 865 600	5 942 341 420	41 554 835	146,6	6,63	153,18	139 860,36	215,93	97,36%	221,8
2018	106 638	90	143	0		2 699 007 780	3 462 912 000	6 161 919 780	43 090 348	164,6	6,49	171,13	136 819,91	211,24	100,95%	209,2
2019	94 353	95	**143**	0		2 388 069 368	3 655 296 000	6 043 365 368	42 261 296	145,7	6,85	152,52	144 421,02	222,97	99,01%	225,2
Total	764 131	726	1357	7,92								**1 079,55**		**1 481,00**		**1 867**
Annual average	152 826	145,2	271,4	3,96												

2,039946166

145864,2444 225,199807

CF 0704

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Conversion of oil no. 2 to electricity**	
Inputs (*original name in french*)	Conversion huile no. 2 vers l'électricité	
Baseline emissions (tCO_2e)	56,196090	56,20
Project emissions (tCO_2e)	0,326688	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	55,869402	**56,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil consumption	
Data in	**20 549,00**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	56,196090	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in	**160 141,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,326688	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0704
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2013	Others
1	Evidence provided by client's facility	Oil no.2 annual consumption	L	*Baseline Scenario*	2013		*20 549,00*	
2	Evidence provided by client's facility	Annual electricity consumption	kWh	Project Scenario	2013	160 141,00	0,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0706

Traceability realized on each micro-project

1000000

2019	Scope 3							Sous-total
PAI	1	2	3	4	5	6	7	
Inputs (english)	Stream origin: EWMI Fairless Hill (Stablex)	Stream origin: Mosaic (SNC) <50 ppm	Stream origin: Middle Harbour (QM)	Stream origin: FL Dept. Env. Protextion (Ona)	Stream origin: Reliance (Sanexen) (Sol)	Stream origin: BP Whiting (Heritage/ USE)	Stream origin: Other projects	
Inputs (*original name in french*)								
Baseline emissions (tCO_2e)	4170,754872	1008,609545	650,215179	473,284974	1266,530351	855,679018	2780,522129	11205,60
Project emissions (tCO_2e)	1145,442721	277,001286	178,573008	129,981465	347,835827	235,000937	763,633666	3077,47
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	3025,312152	731,608260	471,642171	343,303509	918,694524	620,678081	2016,888464	**8128,00**
Baseline emissions (tCO_2e)								
Baseline scenario description	Butane consumption	Butane consumption	Butane consumption	Butane consumption	Butane consumption	Butane consumption	Butane consumption	
Data in	2 321 736,66	561 463,29	361 955,68	263 463,84	705 040,22	476 331,36	1 547 834,95	
EF (tCO2e/Metric tons)	0,001764	0,001764	0,001764	0,001764	0,001764	0,001764	0,001764	
Equation: result in tCO_2e	4095,506320	990,412262	638,484029	464,745990	1243,679673	840,240899	2730,356087	
Baseline emissions (tCO_2e)								
Baseline scenario description	Propane consumption	Propane consumption	Propane consumption	Propane consumption	Propane consumption	Propane consumption	Propane consumption	
Data in	48 736,61	11 785,93	7 597,97	5 530,49	14 799,82	9 998,88	32 491,30	
EF (tCO2e/Metric tons)	0,001544	0,001544	0,001544	0,001544	0,001544	0,001544	0,001544	
Equation: result in tCO_2e	75,248553	18,197283	11,731150	8,538984	22,850678	15,438118	50,166042	
Projects emissions (tCO_2e)								
Description	Propane consumption	Propane consumption	Propane consumption	Propane consumption	Propane consumption	Propane consumption	Propane consumption	
Data in	741 874,73	179 406,84	115 657,29	84 185,76	225 284,61	152 204,26	494 586,52	
EF (tCO2e/Metric tons)	0,001544	0,001544	0,001544	0,001544	0,001544	0,001544	0,001544	
Equation: result in tCO_2e	1145,442721	277,001286	178,573008	129,981465	347,835827	235,000937	763,633666	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VII	PAI VII	PAI VII	PAI VII	PAI VII	PAI VII	PAI VII	
Number of PAI attributed	1	1	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	Methane avoidance	
Inputs (*original name in french*)	Détournement de l'enfouissement	
Baseline emissions (tCO_2e)	2002,000000	2002,00
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	2002,000000	**2002,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Contaminated soil avoided from landfill	
Data in Metric tons (Mt)	45500,00	
EF (tCO2e/Metric tons)	0,044000	
Equation: result in tCO_2e	2002,000000	
Baseline emissions (tCO_2e)		
Baseline scenario description	-	
Data in Metric tons (Mt)	0,00	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description	-	
Data in Metric tons (Mt)	0,00	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0706
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments (2017 only)	Baseline	2019	Others
	Evidence provided by clients facility	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**16 935,23**	
	Will's calculations		%			37,2%	
	Evidence provided by clients facility	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**4 095,43**	
	Will's calculations		%			9,0%	
	Evidence provided by clients facility	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**2 640,18**	
	Will's calculations		%			5,8%	
	Evidence provided by clients facility	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**1 921,76**	
	Will's calculations		%			4,2%	
	Evidence provided by clients facility	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**5 142,71**	
	Will's calculations		%			11,3%	
	Evidence provided by clients facility	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**3 474,46**	
	Will's calculations		%			7,6%	
11	**Evidence provided by clients facility**	**Volume of soil contaminated processed**	**Mt**	**Confidential**		**11 290,23**	
	Will's calculations		%			24,8%	
						45 500,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Baseline 2010 - 10 283 Mt of GHG emissions
27 874 Mt of contaminated soil processed in 2015, less than 20% difference

111,5%

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by clients facility	Total of contaminated soil processed	*Mt*		2010	**45 500,00**	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 0,044 tCO2e/ metric tonnes is the emission factor for hydrocarbon contaminated soils that have been diverted from landfill.
PAI Réf: WARM USEPA Version 13 (March 2015)

CF 0707

Traceability realized on each micro-project

2019	Scope 13												Sous-total
PAI	1	2	3	4	5	6	7	8	9	10	11	12	
Inputs (english)	**Wastewater treatment sludge**	**Septic tank sludge (STS)**	**Municipal Biosolids**	**Grease trap**	**Putrescibles**	**Green residues**	**Pulp and Paper Sludge**	**Ashes**	**Water to be treated**	**Channel Sand**	**Residues STS**	**Lixiviat landfill (Lac St-Jean)**	
Inputs (*original name in french*)	Boues d'usines d'épurations	Boues Fosses septiques	Biosolides municipaux	Trappe à graisse	Putrescibles	Résidus verts	Boues de papetières	Cendres	Eaux à traiter	Sable de caniveau	Résidus BFs	Lixiviat LET (Lac St-Jean)	
Baseline emissions (tCO_2e)	29671,323224	21127,739490	0,000000	0,000000	514,732519	93,351081	0,000000	0,000000	284,636009	0,000000	594,666587	0,000000	52286,45
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	29671,323224	21127,739490	0,000000	0,000000	514,732519	93,351081	0,000000	0,000000	284,636009	0,000000	594,666587	0,000000	**52286,00**
Baseline emissions (tCO_2e)													
Baseline scenario description	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	Waste composted and diverted from landfill	
Data in Metric tons (Mt)	**14231,26**	**10133,50**	**0,00**	**0,00**	**753,37**	**136,63**	**0,00**	**0,00**	**136,52**	**0,00**	**285,22**	**0,00**	
EF (tCO2e/Metric tons)	2,084940	2,084940	0,000000	0,000000	0,683240	0,683240	0,000000	0,000000	2,084940	0,000000	2,084940	0,000000	
Equation: result in tCO_2e	29671,3232	21127,7395	0,0000	0,0000	514,7325	93,3511	0,0000	0,0000	284,6360	0,0000	594,6666	0,0000	
Projects emissions (tCO_2e)													
Description													
Data in Metric tons (Mt)	**0,00**	**0,00**	**0,00**	**0,00**	**753,37**	**136,63**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	**USEPA WARM v. 15**	
Sectoral scope	13	13	13	13	13	13	13	13	13	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	
Number of PAI attributed	4	4	4	4	4	4	4	4	4	4	4	4	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

CF 0707
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client facility	Waste stream composted	Mt	Municipal wastewater treatment sewage slud	2007	14 231,26	
2	Evidence provided by client facility	Waste stream composted	Mt	Septic tank sludge (STS)	2007	10 133,50	
3	Evidence provided by client facility	Waste stream composted	Mt	Municipal biosolids (ponds)	2007	0,00	
4	Evidence provided by client facility	Waste stream composted	Mt	Grease trap	2007	397,14	
5	Evidence provided by client facility	Waste stream composted	Mt	Putrescibles (food residues)	2007	753,37	
6	Evidence provided by client facility	Waste stream composted	Mt	Green residues	2007	136,63	
7	Evidence provided by client facility	Waste stream composted	Mt	Pulp & Paper sludges	2007	0,00	
8	Evidence provided by client facility	Waste stream composted	Mt	Ashes	2007	0,00	
9	Evidence provided by client facility	Waste stream composted	Mt	Water to be treated	2007	136,52	
10	Evidence provided by client facility	Waste stream composted	Mt	Channel sand	2007	0,00	
11	Evidence provided by client facility	Waste stream composted	Mt	Residues STS	2007	285,22	
12	Evidence provided by client facility	Waste stream composted	Mt	Lixiviat landfill and pigeon droppings	2007	0,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

26 073,64

Assumptions/notes on each PAI's:

PAI

PAI

CF 0710

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Conversion of oil no.6 boiler to biomass**	
Inputs (*original name in french*)	Conversion mazout lourd vers biomasse	
Baseline emissions (tCO_2e)	3186,236967	3186,24
Project emissions (tCO_2e)	0,418321	0,4183
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	3185,818646	**3185,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no. 6 Consumption	
Data in	**1 012 674,00**	
EF (tCO2e/Metric tons)	0,003146	
Equation: result in tCO_2e	3186,236967	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**11 631,00**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,418321	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Mixed paper**	**Bark Residues**	
Inputs (*original name in french*)	Récupération papier/carton	Résidus écorces	
Baseline emissions (tCO_2e)	8,941199	56053,692840	56062,63
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	8,941199	56053,692840	**56062,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Mixed paper recycled and diverted from landfill	Biomass reused and diverted from landfill	
Data in Metric tons (Mt)	**2,76**	**29 233,00**	
EF (tCO2e/Metric tons)	3,239565	1,917480	
Equation: result in tCO_2e	8,941199	56053,692840	
Projects emissions (tCO_2e)			
Description	-	-	
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM V.15**	**USEPA WARM V.15**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	85	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0710
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2016	Others
1	Evidence provided by client's facility	Oil no.6 consumption	*L*	*Project implemented mid-2017*	2016	0,00	1 012 674,00	*Baseline*
	Evidence provided by client's facility	Biomass consumption for boiler	Mt			11 631,00	0,00	Project

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI The switch in fuel started beyond the ending period of December 2016 of this verification. This should be included in the next verification.

PAI The oil no.6 boiler is out of order in 2018.

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2016	Others
1	**Evidence provided by client's facility**	Mixed paper	Mt	*Started in 2018 - kg converted to M*	2017	2,76		
2	**Evidence provided by client's facility**	Bark residues	Mt		2017	29 233,00	69 270,30	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Recuperation's program of mixed paper (with CODERR) began beyond the ending period of December 31st 2016 of this current verification.

PAI Bark residues have been managed differently since 2007 (see CA du MDDELCC), instead of being sent to landfill they are being recycled into the production process (for the energy valorisation).

CF 0712

Traceability realized on each micro-project

2019	Scope 13			Sous-total
PAI	**1**	**2**	**3**	
Inputs (english)	**Recycling office (white) paper**	**Recycling mixed paper**	**Recycling cardboard**	
Inputs (*original name in french*)	Recyclage papiers blancs	Recyclage papiers mélangés	Recyclage carton	
Baseline emissions (tCO_2e)	136,857000	0,000000	724,044856	860,90
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	136,857000	0,000000	724,044856	**860,00**
Baseline emissions (tCO_2e)				
Baseline scenario description	White paper recycled and diverted from landfill	Mixed paper recycled and diverted from landfill	Cardboard recycled and avoided from landfill	
Data in	**34,30**	**0,00**	**197,90**	
EF (tCO2e/Metric tons)	3,990000	3,239565	3,658640	
Equation: result in tCO_2e	136,857000	0,000000	724,044856	
Projects emissions (tCO_2e)				
Description				
Data in	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**US EPA WARM v.15**	**US EPA WARM v.15**	**US EPA WARM v.15**	
Sectoral scope	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI	PAI	PAI	
Number of PAI attributed	1	1	1	
Ownership	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	

CF 0712
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Recycling office (white) paper	Mt		2009	34,30	
2	Evidence provided by client's facility	Recycling mixed paper	Mt		2009	0,00	
3	Evidence provided by client's facility	Recycling cardboard	Mt		2009	197,90	
						232,20	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0802

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Conversion propane to biomasse**	
Inputs (*original name in french*)	Conversion du propane à la biomasse	
Baseline emissions (tCO_2e)	333,240564	333,24
Project emissions (tCO_2e)	22,626211	22,63
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	310,614354	**310,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Propane consumption	
Data in	**215 831,62**	
EF (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	333,240564	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**629 100,00**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	22,626211	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0802
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2009	2008	Others
1	**Evidence provided by client's facility**	**Propane baseline consumption adjusted**	**L**	**Base line data**	**Baseline**	**215832**	**154490**		
		Chicken production	unit			760000	520000		
		Turkey production	unit			0	24000		
	Evidence provided by client's facility	Intensity production	%		2009	140%	100%		
	Will's calculations	**weight biomass**	**kg**	**Project emission data (kg to Mt)**		**629100**			
	Annual register by Client Facility	Purchase of biomass	SCDN			37746			
	Evidence provided by client's facility	Average price	SCDN	*25800 kg/1500$*	2009	0,06			

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Number written **in bold** are used for data requirement in each year GHG's calculations (baseline and project)

Biomass consumption confirmed by the client at **60$/tonne** for 2019 and 2020.

2019 37746$

CF 0804

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	1	2	
Inputs (english)	**Design with electricity instead of fossil fuel**	**Design with electricity instead of fossil fuel**	
Inputs (*original name in french*)	Choix design de l'électricité au lieu d'énergie fossile (Building 1)	Choix design de l'électricité au lieu d'énergie fossile (Building 2)	
Baseline emissions (tCO_2e)	13,099985	65,345147	78,45
Project emissions (tCO_2e)	0,299594	2,014459	2,31
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	12,800391	63,330688	**76,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Equivalent basket - Natural Gas	Equivalent basket - Natural Gas	
Data in liters	**2 843,30**	**27 677,46**	
EF (tCO2e/Metric tons)	0,001889	0,001889	
Equation: result in tCO_2e	5,370995	52,282722	
Baseline emissions (tCO_2e)			
Baseline scenario description	Equivalent basket - Oil no.2	Equivalent basket - Oil no.2	
Data in liters	**335,28**	**4 650,42**	
EF (tCO2e/Metric tons)	0,002735	0,002735	
Equation: result in tCO_2e	0,916990	12,718885	
Baseline emissions (tCO_2e)			
Baseline scenario description	Equivalent basket - electricity	Equivalent basket - electricity	
Data in Kwh	**3 339 215,70**	**168 402,00**	
EF (tCO2e/Metric tons)	0,000002	0,000002	
Equation: result in tCO_2e	6,812000	0,343540	
Projects emissions (tCO_2e)			
Description	Electricity consumption	Electricity consumption	
Data in	**146 860,00**	**987 480,00**	
EF (tCO2e/Metric tons)	0,000002	0,000002	
Equation: result in tCO_2e	0,299594	2,014459	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI X	PAI X	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	**Organic waste composted**	
Inputs (*original name in french*)	Compostage des matières organiques	
Baseline emissions (tCO_2e)	0,000000	0,00
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	0,000000	**0,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Organic matters	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Baseline emissions (tCO_2e)		
Baseline scenario description	Organic matters	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Baseline emissions (tCO_2e)		
Baseline scenario description	Organic matters	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description	Landfill diversion	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0804
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2013	Others
1	Evidence provided by client's facility	Annual electricity consumption	kWh	*Building 1*	2013	146 860,0	163 160,0	
	Will's calculations					90%		
	Will's calculations	Equivalent (oil, natural gaz and electrical)	t CO2e		2013	11,70	13,0	
2	Evidence provided by client's facility	Annual electricity consumption	kWH	Building 2	2013	987 480,0	316 080,0	
	Will's calculations					312%		
	Will's calculations	Equivalent (oil, natural gaz and electrical)	t CO2e		2013	203,07	65,0	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI The results in P9 and P11 originate from prequantification calculations. (see Prequantification sheet)
Percentages for electricity, natural gas and fuel oil come from: Réf: État de l'énergie 2016 Pierre-Olivier Pinault

					Baseline
		Energy bucket (Building 1)	**ref. %**	**2013**	**in tCO2e**
Electricity emission factor	0,00000204	Electricity (kWh)	52%	6 421 569	6,81
Natural gaz emission factor	0,001889	Natural Gaz (m3)	41%	6 935	5,37
Oil no. 2 emission factor	0,002735	Fuel Oil No.2 (L)	7%	4 790	0,92
					13,1
		Energy bucket (Building 2)		**2013**	**in tCO2e**
		Electricity (kWh)	52%	323 850	0,34
		Natural Gaz (m3)	41%	67 506	52,28
		Fuel Oil No.2 (L)	7%	66 435	12,72
					65,35

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2013	Others
1	Evidence provided by client's facility	Organic waste put in composter	*Mt*	*not in use in 2019*	2014	*0,00*	*0,00*	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0805

Traceability realized on each micro-project

2019	Scope 13	Sous-total
PAI	**1**	
Inputs (english)	**Urban biomass diverted from landfill**	
Inputs (*original name in french*)	-	
Baseline emissions (tCO_2e)	57462,730273	57462,73
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	57462,730273	**57462,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Urban biomass reused and diverted from landfill	
Data in Metric tons (Mt)	**32187,68**	
EF (tCO2e/Metric tons)	1,785240	
Equation: result in tCO_2e	57462,730273	
Projects emissions (tCO_2e)		
Description		
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**US EPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI	
Number of PAI attributed	3	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF 0805
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by the cient's facility	Urban biomass (bois de démolition, bobine de fils, palette)	MT	net weight	2009	32 187,68	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Urban biomass is not sent to landfill and used in the production of CF in replacement of virgin materials.

PAI

CF 0806

Traceability realized on each micro-project

2019	Scope 13	Sous-total
PAI	**1**	
Inputs (english)	**Composted leaves on-site (farms)**	
Inputs (*original name in french*)	Déchets feuilles compostées aux fermes	
Baseline emissions (tCO_2e)	444,718236	444,72
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	444,718236	**444,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Dead leaves composted and diverted from landfill	
Data in metric tons	**790,45**	
EF (tCO2e/Metric tons)	0,562614	
Equation: result in tCO_2e	444,718236	
Projects emissions (tCO_2e)		
Description	Avoidance from landfill	
Data in metric tons	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	39	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF0806
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Volume of leaves composted at farms	*Mt*	*Projects regrouped under Client Facility project*	2008	790,45	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF 0808
Traceability realized on each micro-project

2019	Scope 13																									Sous-total
PAI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Inputs (english)	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	
Inputs (*original name in french*)	Client 1	Client 2	Client 3	Client 4	Client 5	Client 6	Client 7	Client 8	Client 9	Client 10	Client 11	Client 12	Client 13	Client 14	Client 15	Client 16	Client 17	Client 18	Client 19	Client 20	Client 21	Client 22	Client 23	Client 24	Client 25	
Baseline emissions (tCO_2e)	2654,651880	15208,459560	1826,300520	71,409600	490,941000	207,087840	340,980840	321,343200	480,229560	0,000000	373,115160	2845,672560	1088,996400	2472,557400	11182,743160	17,852400	167,812560	99,973440	0,000000	312,417000	148,174920	94,617720	151,745400	0,000000	2208,341880	42765,42
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	2654,651880	15208,459560	1826,300520	71,409600	490,941000	207,087840	340,980840	321,343200	480,229560	0,000000	373,115160	2845,672560	1088,996400	2472,557400	11182,743160	17,852400	167,812560	99,973440	0,000000	312,417000	148,174920	94,617720	151,745400	0,000000	2208,341880	**42765,00**
Baseline emissions (tCO_2e)																										
Baseline scenario description	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	
Data in Metric tons (Mt)	1 487,0	8 519,0	1 023,0	40,0	275,0	116,0	191,0	180,0	269,0	0,0	209,0	1 594,0	610,0	1 385,0	6 264,0	10,0	94,0	56,0	0,0	175,0	83,0	53,0	85,0	0,0	1 237,0	
EF (tCO2e/Metric tons)	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	
Equation: result in tCO_2e	2654,651880	15208,459560	1826,300520	71,409600	490,941000	207,087840	340,980840	321,343200	480,229560	0,000000	373,115160	2845,672560	1088,996400	2472,557400	11182,743160	17,852400	167,812560	99,973440	0,000000	312,417000	148,174920	94,617720	151,745400	0,000000	2208,341880	
Projects emissions (tCO_2e)																										
Description																										
Data in Metric tons (Mt)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.1**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	**USEPA WARM v.15**	
Sectoral scope	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
Additionnality *(refer to section 2.2 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.2 of the Monitoring Report)*	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.2 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	
Number of PAI attributed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

CF 0808
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	1 487,00	
2	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	8 519,00	
3	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	1 023,00	
4	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	40,00	
5	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	275,00	
6	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	116,00	
7	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	191,00	
8	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	180,00	
9	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	269,00	
10	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
11	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	209,00	
12	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	1 594,00	
13	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	610,00	
14	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	1 385,00	
15	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	6 264,00	
16	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	10,00	
17	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	94,00	
18	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	56,00	
19	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
20	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	175,00	
21	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	83,00	
22	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
23	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
24	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
25	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
26	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
27	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
28	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
29	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
30	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
31	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
32	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
33	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
34	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
35	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
36	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
37	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
38	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
39	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
40	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	53,00	
	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	85,00	
	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	0,00	
	Evidence provided by clients facility	*Confidential*	*Mt*	*see compilation client facility sheet*	2010	1 237,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

23 955,00

Assumptions/notes on each PAI's:

PAI 2 454,71

PAI

CF 0901

Traceability realized on each micro-project

2019	Scope 13		Sous-total
PAI	**2**	**3**	
Inputs (english)	**Organic Wastes**	**Paper/Cardboard**	
Inputs (*original name in french*)	Compostage et résidus verts	Papier/carton	
Baseline emissions (tCO_2e)	932,650854	4195,747230	5128,40
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	932,650854	4195,747230	**5128,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Organic waste composted and avoided from landfill	Paper and carboard recylced and avoided from landfill	
Data in Metric tons (Mt)	**1657,71**	**1295,16**	
EF (tCO2e/Metric tons)	0,562614	3,239565	
Equation: result in tCO_2e	932,650854	4195,747230	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM V.15**	**USEPA WARM V.15**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF 0901
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Sludges (biosolids)	Mt	Biosolids	2016	0,00	
2	Evidence provided by client's facility	Selective collection, total recycling	Mt		2013	1 598,96	
	Statistics from Recyc Quebec	% paper/cardboard	%			0,81	
	Will's calculations	paper/cardboard recycled	Mt			1 295,16	
3	Evidence provided by client's facility	Organic matter	Mt	Includes green residues, christmas trees and food waste from brown bins	2013	1 657,71	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 Drainage of the ponds occurs once every 10 years, which explains the fact that there is only data for 2016. The previous drainage was in 2006.

PAI 1 Sludges in 2016 were reevaluated as soil for agricultural land.

PAI 2 The % of recycled mixed cardboard and paper from all volume recycled was from Recyc Quebec 2018 report (last report issued).

CF 0910

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Electrification of the crusher**	
Inputs (*original name in french*)	Électrification du broyeur	
Baseline emissions (tCO_2e)	56,162938	56,16
Project emissions (tCO_2e)	0,436968	0,44
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	55,725970	**55,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Equivalent diesel consumption	
Data in L	**20 131,58**	
EF (tCO2e/L)	0,002790	
Equation: result in tCO_2e	56,1629	
Projects emissions (tCO_2e)		
Description	Electrity consumption	
Data in kWh	**214 200,00**	
EF (tCO2e/kWh)	0,000002	
Equation: result in tCO_2e	0,4370	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Reuse of biomass instead of landfill**	**Recycling cardboard**	
Inputs (*original name in french*)	Recyclage biomasse en lieu de l'enfouissement	Recyclage carton	
Baseline emissions (tCO_2e)	13167,317780	320,521579	13487,84
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	13167,317780	320,521579	**13487,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Biomass reused and diverted from landfill	Cardboard recycled and diverted from landfill	
Data in Metric tons (Mt)	**8 957,03**	**106,39**	
EF (tCO2e/Metric tons)	1,470054	3,012704	
Equation: result in tCO_2e	13167,3178	320,5216	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,0000	0,0000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	5	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF0910
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by the client's facility	Electricity consumption	*KWh*		2015	214 200,00	*Baseline*
	Will's calculations	Equivalent liters of diesel	L	10.64 KWh/liter		20 131,58	Project
2	Evidence provided by the client's facility	Biomass used for energy at customers receiving sites	Mt				
	Will's calculations	Equivalent energy	Mj	19.20/kg			
	Will's calculations	Equivalent in oil consumption	L	38.50Mj/liters			

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1	Electrification of crusher implemented in May 2016: Power supply 112-298KW, working 40 hrs/week for 7 months/yr (June to December)	10,64
	Validation with yearly electricity (HQ) bills	19,2
	Real consumption for 2016	38,5

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by the client's facility	Urban biomass avoided from landfill	*Mt*	*extrants*	2013	8 957,03	
2	Evidence provided by the client's facility	Carboard recuperated and recycled	Mt	intrants	2013	106,39	
3	Evidence provided by the client's facility	Organic waste composted	Mt	intrants	2013	0,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1005

Traceability realized on each micro-project

2019	Scope 3		Sous-total
PAI	**1**	**2**	
Inputs (english)	**CF Wood Dryers 1, 2, 3, 4 and 5**	**CF Wood Dryers 1 and 2**	
Inputs (*original name in french*)			
Baseline emissions (tCO_2e)	12876,350876	8333,682616	21210,03
Project emissions (tCO_2e)	1362,358200	819,797007	2182,16
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	11513,992677	7513,885609	**19027,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Equivalent propane consumption	Equivalent propane consumption	
Data in	**7 869 932,83**	**5 397 518,77**	
EF (tCO2e/Metric tons)	0,001544	0,001544	
Equation: result in tCO_2e	12151,0504	8333,682616	
Baseline emissions (tCO_2e)			
Baseline scenario description	Natural gas consumption	-	
Data in	**383 895,00**	**0,00**	
EF (tCO2e/Metric tons)	0,001889	0,000000	
Equation: result in tCO_2e	725,300501	0,000000	
Projects emissions (tCO_2e)			
Description	Biomass consumption	Biomass consumption	
Data in	**9 959,40**	**6 830,56**	
EF (tCO2e/Metric tons)	0,000036	0,000036	
Equation: result in tCO_2e	0,358200	0,245668	
Projects emissions (tCO_2e)			
Description	Natural gas consumption after PAI	Propane consumption after PAI	
Data in	**721 306,00**	**530 803,00**	
EF used (tCO2e/Metric tons)	0,001889	0,001544	
Equation: result in tCO_2e	1362,000000	819,551339	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	PAI I	
Number of PAI attributed	5	2	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF1005
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description		Unit	Comments	Baseline	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	Others
1	Evidence provided by clients facility	Production of wood Plant 1		*MMp*	*Million en mesure planche*	2011	61057	55 569	76 173	70 085	60 426	53 963	44 775	61 456	45189	0	
	Will's calculations	*% production increase*		*%*	*ref 2011*		135%	123%	169%	155%	134%	119%	99%	136%	100%		
	Evidence provided by clients facility	biomass (bark) used for drying		*TMV*	*base verte*		22635	13 891	38 768	42 223	41 648	39 608	32 449	43 691	32 348		
	Will's calculations	biomass (bark) used for drying		TMA	*base sèche*		9959,4	6112	17058	18 578	18 325	17 428	14 278	19 224	14 233		
	Will's calculations	equivalent energy		Mj	*20 MJ for 1 kg of bark*		199188000	122 240 800	341158400	371 562 400	366 502 400	348 550 400	285 551 200	384 480 800	284 662 400		
	Will's calculations	equivalent propane consumption		l	*25,31 Mj for 1 liters of propane*		7869933	4 829 743	13 479 194	14 680 458	14 480 537	13 771 252	11 282 149	15 190 865	11 247 033		
	Evidence provided by clients facility	natural gaz consumption		M3			721306	886 018	844 970	850 060	383895						
2	Evidence provided by clients facility	Production of wood Plant 2		*MMp*	*Million en mesure planche*	2009	48029	53 050,00	50 041,00	55 082	52 963	42 998	37 253	37 352	34 000	34632	
	Will's calculations	*% production increase*		*%*	*ref 2010*		139%	153%	144%	159%	153%	124%	108%	108%	98%	100%	
	Evidence provided by clients facility	biomass (bark) used for drying		`TMV	*base verte*		15524	4 776,00	16 859,00	25 438	28 092	27 917	15 725	20 860	21 092	14 911	
	Evidence provided by clients facility	biomass (bark) used for drying		TMA	base sèche		6830,56	2 101	7 418	11 193	12 360	12 283	6 919	9 178	9 280	6 561	
	Will's calculations	equivalent energy		Mj	*20 MJ for 1 kg of bark*		136611200	42 028 800	148 359 200	223 854 400	247 209 600	245 669 600	138 380 000	183 568 000	185 609 600	131 216 800	
	Will's calculations	equivalent propane consumption		l	*25,31 Mj for 1 liters of propane*		5397519	1 660 561	5 861 683	8 844 504	9 767 270	9 706 424	5 467 404	7 252 785	7 333 449	5 184 386	
	Evidence provided by clients facility	Propane consumption		l			530803	177 477	0	0	0	0	0				

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 44% ratio between TMA (dry) and TMV (verte) résineux http://afpq03.ca/wp-content/uploads/2014/06/EQUIVAL.pdf

PAI

CF1008

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch fuel to geothermal system**	
Inputs (*original name in french*)	Utilisation d'un système de géothermie	
Baseline emissions (tCO_2e)	24,028245	24,03
Project emissions (tCO_2e)	2,688102	2,69
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	21,340143	**21,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Energy basket - Propane	
Data in liters	**12 855,32**	
EF (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	19,848611	
Baseline emissions (tCO_2e)		
Baseline scenario description	Energy basket - Oil no.2	
Data in liters	**1 442,86**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	3,945796	
Baseline emissions (tCO_2e)		
Baseline scenario description	Energy basket - Electricity	
Data in Kwh	**114 626,96**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,233839	
Projects emissions (tCO_2e)		
Description	Electrcity consumption	
Data in	**208 526,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,425393	
Projects emissions (tCO_2e)		
Description	Propane consumption	
Data in	**1 465,50**	
EF used (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	2,262709	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1008
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description		Unit	Comments	Baseline	2019	2008	Others
1	Evidence provided by Client facility	Electricity consumption		*KWh*		2006	*208 526,00*		
	Will's calculations	Benchmark of commercial and institutionnal buildings (basket of electricity, propane and oil no. 2) see bottom line		tCO2e	Baseline Scenario		24,02		
	Evidence provided by Client facility	Propane consumption		L	City Hall consumption		1 465,50		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 **Pondération**

1000000

Source énergie	% d'utilisation dans le parc bâtiments bureaux	Réductions	Pondération	
Électrique	52%	0,45	0,2	*Pjoules*
Propane	41%	48,39	19,8	*(50-28/54*
huile no. 2	7%	56,34	3,9	*4/54PJoules*
		Réductions de GES pondérée	**24**	

* *Reference: État de l'énergie au Québec, 2016 from the Chaire de gestion su secteur de l'énergie, HEC Montréal*

Page 26 : 48% of commercial and institutional buildings use fossil energy (natural gas, oil no. 2 and propane); 31% for heating and 17% for lighting.

Électrique

2006	*Année début de projet*
793 774	Savings in Megajoules (valeur calorifique), page 6 of *État de l'énergie au québec (2016)* *
752	*Equivalent savings in Million of BTU*
752 349 629	*BTU Quantité à considérer (avec unité) valeur calorifique*
3 413	*BTU/kwh*
220 436	*Kwh equivalent*
0,00000204	*tCO2e/kwh emission factor from MERN 2019*
0,45	*tCO2e*

1 BTU = 1055,06 Joules

Réf https://www.google.ca/search?q=Conversion+BTU+en+Jouls&rlz=1C1LDJZ_enCA499CA502&oq=Conversion+BTU+en+Jouls&aqs=chrome..69i57j0l2.11439j0j8&sourceid=chrome&ie=UTF-8

Gaz Propane (since natural gas is not available in Saint-Sauveur city)

2006	*Année du début de propane: le gaz naturel pas disponible à St-Sauveur*
752	*Différentiel + chauffage +eau chaude en MBTU; ((526,3-345,3) + 271,1+ 34,5) à considérer pour la valeur calorifique.*
752 349 629	*BTU Quantité à considérer (avec unité) valeur calorifique*
23 995	*BTU/litres propane*
31 354	*litre de propane équivalent*
0,001544	*tCO2e/liters emission factor for propane*
48	*tCO2e*

Huile no. 2

2006	*Année du début d eprojet*
752	*Différentiel + chauffage +eau chaude en MBTU; ((2686,5-1581,2) + 1196,6+ 123,2) à considérer pour la valeur calorifique*
752 349 629	*BTU Quantité à considérer (avec unité) valeur calorifique*
36 500	*BTU/litre et F.É. huile # 2*
20 612	*Litres huile # 2 équivalent*
0,002735	*tCO2e/liters de huile # 2*
56,4	*tCO2e*

CF1011
Traceability realized on each micro-project

2019	Scope 3									Sous-total
PAI	1	2	3	4	5	6	7	8	9	
Inputs (english)	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	Energy conversion from naturale gas to electricity	
Inputs (*original name in french*)	School 1	School 2	School 3	School 4	School 5	School 6	School 7	School 8	School 9	
Baseline emissions (tCO_2e)	0,000000	0,000000	388,295228	83,002645	85,018648	254,760873	0,000000	271,579470	73,454544	1156,11
Project emissions (tCO_2e)	0,000000	0,000000	291,003303	66,837270	79,554399	159,762586	0,000000	158,732735	47,403204	803,29
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	0,000000	0,000000	97,291925	16,165375	5,464249	94,998287	0,000000	112,846735	26,051340	**352,00**
Baseline emissions (tCO_2e)										
Baseline scenario description	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	
Data in	0,00	0,00	204 218,00	43 802,00	44 763,00	133 946,00	0,00	142 212,00	38 742,00	
EF (tCO2e/Metric tons)	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	
Equation: result in tCO_2e	0,000000	0,000000	385,833152	82,755995	84,571631	253,066857	0,000000	268,683976	73,196035	
Baseline emissions (tCO_2e)										
Baseline scenario description	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	
Data in	0,00	0,00	1 206 900,00	120 907,00	219 126,00	830 400,00	0,00	1 419 360,00	126 720,00	
EF (tCO2e/Metric tons)	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	
Equation: result in tCO_2e	0,000000	0,000000	2,462076	0,246650	0,447017	1,694016	0,000000	2,895494	0,258509	
Projects emissions (tCO_2e)										
Description	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	Natural gas consumption	
Data in	0,00	0,00	152 387,00	35 224,00	41 837,00	83 678,00	0,00	82 448,00	24 937,00	
EF (tCO2e/Metric tons)	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	0,001889	
Equation: result in tCO_2e	0,000000	0,000000	287,907807	66,549408	79,043481	158,094519	0,000000	155,770655	47,113973	
Projects emissions (tCO_2e)										
Description	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	Electricity concumption	
Data in	0,00	0,00	1 517 400,00	141 109,00	250 450,00	817 680,00	0,00	1 452 000,00	141 780,00	
EF used (tCO2e/Metric tons)	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	0,000002	
Equation: result in tCO_2e	0,000000	0,000000	3,095496	0,287862	0,510918	1,668067	0,000000	2,962080	0,289231	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	3	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	VIII	VIII	VIII	VIII	VIII	VIII	VIII	VIII	VIII	
Number of PAI attributed	1	1	1	1	1	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

CF1011
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2018	2017	2016	2015	2014	2013	2012	2011	Others
1	Evidence provided by client's facility	Natural gas consumption	M^3	*School 1*	2011	**56372,00**	47347,00	39366,00	38991,00	40018,00	**47610,00**	33892,00	13671,00	14602,00	
	Evidence provided by client's facility	Electricity consumption	*kWh*			1990800,00	1887600,00	1735108,00	1801821,00	1985617,00	**2142304,00**	2319432,00	2338156,00	2621961,00	
2	Evidence provided by client's facility	Natural gas consumption	M^3	School 2	2014	**18884,00**	12641,00	9162,00	4290,00	4944,00	**6700,00**	5763,00	4849,00	4318,00	
	Evidence provided by client's facility	Electricity consumption	*kWh*			640080,00	616080,00	667843,00	702282,00	759071,00	**818300,00**	835635,00	848164,00	848164,00	
3	Evidence provided by client's facility	Natural gas consumption	M^3	School 3	2011	**152387,00**	138638,00	86476,00	113752,00	153952,00	163569,00	203176,00	207863,00	**204218,00**	
	Evidence provided by client's facility	Electricity consumption	*kWh*			1517400,00	1539000,00	1609681,00	1368900,00	1468812,00	1323900,00	1172700,00	1097100,00	**1206900,00**	
4	Evidence provided by client's facility	Natural gas consumption	M^3	School 4	2012	**35224,00**	26946,00	23561,00	23873,00	35218,00	33952,00	25582,00	**43802,00**	42176,00	
	Evidence provided by client's facility	Electricity consumption	*kWh*			141109,00	146350,00	152890,00	152282,00	114061,00	142433,00	179921,00	**120907,00**	127840,00	
5	Evidence provided by client's facility	Natural gas consumption	M^3	School 5	2012	**41837,00**	33518,00	15408,00	16730,00	39622,00	44261,00	50749,00	**44763,00**	39903,00	
	Evidence provided by client's facility	Electricity consumption	*kWh*			250450,00	282345,00	354891,00	348026,00	272252,00	240785,00	235938,00	**219126,00**	298725,00	
6	Evidence provided by client's facility	Natural gas consumption	M^3	School 6	2011	**83678,00**	81525,00	72263,00	95843,00	100361,00	119930,00	130262,00	133946,00	**131933,00**	
	Evidence provided by client's facility	Electricity consumption	*kWh*			817680,00	851040,00	921353,00	951422,00	969786,00	917280,00	853680,00	830400,00	**837360,00**	
7	Evidence provided by client's facility	Natural gas consumption	M^3	School 7	2012	**30803,00**	23119,00	4808,00	11502,00	31393,00	35130,00	36645,00	**23065,00**	19646,00	
	Evidence provided by client's facility	Electricity consumption	*kWh*			413260,00	457750,00	461482,00	503600,00	479419,00	488993,00	458282,00	**449413,00**	579436,00	
8	Evidence provided by client's facility	Natural gas consumption	M^3	School 8	2011	**82448,00**	55159,00	27583,00	41341,00	84191,00	134602,00	153196,00	160715,00	**142212,00**	
	Evidence provided by client's facility	Electricity consumption	*kWh*			1452000,00	1542720,00	1477993,00	1486080,00	1500972,00	1561680,00	1518000,00	1420800,00	**1419360,00**	
9	Evidence provided by client's facility	Natural gas consumption	M^3	School 9	2012	**24937,00**	32673,00	26554,00	26194,00	27802,00	28542,00	33787,00	**38742,00**	37242,00	
	Evidence provided by client's facility	Electricity consumption	*kWh*			141780,00	131640,00	125693,00	118080,00	117001,00	126840,00	135960,00	**126720,00**	120600,00	

CF1101

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Conversion of used oil and fuel oil to biomass**	
Inputs (*original name in french*)	Chaudière à biomasse	
Baseline emissions (tCO_2e)	2416,857079	2416,86
Project emissions (tCO_2e)	371,938654	371,94
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	2044,918425	**2044,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Used oil	
Data in	**825 960,00**	
EF (tCO2e/Metric tons)	0,002422	
Equation: result in tCO_2e	2000,772466	
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil #2	
Data in	**152 148,00**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	416,084613	
Projects emissions (tCO_2e)		
Description	Biomasse	
Data in	**2 958,18**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,106394	
Projects emissions (tCO_2e)		
Description	Used oil	
Data in	**153 500,00**	
EF used (tCO2e/Metric tons)	0,002422	
Equation: result in tCO_2e	371,832260	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	20	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	**Landfill avoidance of biomass**	
Inputs (*original name in french*)	Biomasse réutilisé et évité de l'enfouissement	
Baseline emissions (tCO_2e)	5281,061263	5281,06
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	5281,061263	**5281,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Biomass reuse and diversion from landfill	
Data in Metric tons (Mt)	**2958,18**	
EF (tCO2e/Metric tons)	1,785240	
Equation: result in tCO_2e	5281,061263	
Baseline emissions (tCO_2e)		
Baseline scenario description	-	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description		
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description	-	
Data in Metric tons (Mt)	**0,00**	
EF used (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**WARM v.15**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	3	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1101
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2010	Others
1	Evidence provided by client's facility	Oil no. 2 consumption	L	*from transaction accounting of CF's log*	**2010**	*0,00*	152 148,00	
	Evidence provided by client's facility	Used oil consumption	L	*from transaction accounting of CF's log*	**2010**	153 500	825 960,00	
	Evidence provided by client's facility	Biomass	Mt	*from transaction accounting of CF's log*	**2010**	2 958,18		
	Will's calculations	Used oil equivalent	L	*Calculated base on calorific value*	**2010**			
	Evidence provided by client's facility	Propane	L	*from transaction accounting of CF's log*	**2010**	50 736,00		
	Will's calculations	Total energy used	Mj		**2010**		38 202 292	
	Evidence provided by client's facility	Production increase	%		**2010**			
	Evidence provided by client's facility	Area of production	sq feet	2012 = 100% (Greenhouses surface layout)	**2010**	210 000,00		
	Evidence provided by client's facility	Electricity consumption	KWh		**2010**			

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2010	Others
1	Evidence provided by client's facility	Landfill avoidance of biomass	*Mt*	*SPAP Énergie Report (Jan 2012, p. 6-11)*	2010	2 958,18		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1102

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch fuel from oil to electricity**	
Inputs (*original name in french*)	Conversion huile. No 2 à électricité	
Baseline emissions (tCO_2e)	139,969258	139,97
Project emissions (tCO_2e)	1,551834	1,55
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	138,417424	**138,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no. 2 consumption	
Data in Liters	**51 182,00**	
EF (tCO2e/Liters)	0,002735	
Equation: result in tCO_2e	139,969258	
Projects emissions (tCO_2e)		
Description	Oil no. 2 consumption	
Data in Liters	**400,00**	
EF (tCO2e/Liters)	0,002735	
Equation: result in tCO_2e	1,093894	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in kWh	**224 480,00**	
EF (tCO2e/kWh)	0,000002	
Equation: result in tCO_2e	0,457939	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1102
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2012	Others
1	Evidence provided by the client's facilit	Electricity consumption	*KWh*		2012	224 480	76 960	
	Evidence provided by the client's facilit	Oil no.2 consumption	L	Baseline in blue	2012	400	51 182	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1103

Client Facility Audit Ex-Ante

2019	Scope 13				Sous-total
PAI	1	2	3	4	
Inputs (english)	**Organic wastes (sludges)**	**Urban biomass**	**Organic wastes (green residues and wood branches)**	**Mixed cardboard paper**	
Inputs (*original name in french*)	Boues organiques	Biomasse urbaine	Matières organiques	Papier/carton mélangés	
Baseline emissions (tCO_2e)	440,67	3692,29	2190,37	11378,26	17701,60
Project emissions (tCO_2e)	0,00	0,00	0,00	0,00	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	440,67	3692,29	2190,37	11378,26	**17701,00**
Baseline emissions (tCO_2e)					
Baseline scenario description	Organic waste (sludges) composted and avoided from landfill	Urban biomass reused and avoided from landfill	Organic wastes (yard trimmings) composted and avoided from landfill	Mixed carboard and paper recycled and avoided from landfill	
Data in Metric tons	**211,36**	**2511,67**	**3893,21**	**3512,28**	
EF (tCO2e/Metric tons)	2,08494	1,47005	0,56261	3,2396	
Equation: result in tCO2e	440,67	3692,29	2190,37	11378,26	
Projects emissions (tCO_2e)					
Description					
Data in Metric tons	**0,00**	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,00	0,00	0,00	0,00	
Equation: result in tCO_2e	0,00	0,00	0,00	0,00	
Source of Emission Factor (EF)	**CDM-AMS-III**	**USEPA WARM 2018**	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	
Number of PAI attributed	12	12	12	12	
Ownership	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	

CF1103
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019
1	**Evidence provided by client's facility**	**Organic wastes (sludges)**	**Mt**	***sludges from ICI sector***	**2007**	**211,36**
2	**Evidence provided by client's facility**	**Urban biomass**	**Mt**	***recuperated from the CRD sector***	2007	**2 511,67**
3	**Evidence provided by client's facility**	**Organic wastes (green residues and wood branches)**	**Mt**	***from municipal sector***	**2007**	**3 893,21**
4	Evidence provided by client's facility	Total wastes recycled	Mt	*from domestic + ICI sectors*	**2010**	4 336,15
	Will's calculations	% of mixed cardboard paper	%	Official report submited to the MDDELCC		81%
	Will's calculations	**Mixed cardboard paper**	**Mt**			**3 512,28**

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 to 4 Data supplied by the member and extracted from an official report submitted to the MDDELCC (mass balance).

PAI 4 The % of recycling mixed cardboard paper from all volume recycled was from Recyc Quebec 2018 report (last report issued).

PAI Ashes for spreading agricultural farms. At this time we do not have a specific EF for this project activity and we will do not attribute any GHG reductions.

CF1108

Traceability realized on each micro-project

2019	Scope 13				Sous-total
PAI	1	2	3	4	
Inputs (english)	**Urban biomass waste**	**Organic waste**	**Paper/cardboard recycled**	**Food waste**	
Inputs (*original name in french*)	Biomasse urbaine	Résidus organiques	papiers/cartons recyclés	Matières organiques	
Baseline emissions (tCO_2e)	5715,422947	119,648869	6571,496996	1255,760074	13662,33
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	5715,422947	119,648869	6571,496996	1255,760074	**13662,00**
Baseline emissions (tCO_2e)					
Baseline scenario description	Urban biomass reused and avoided from landfill	Organic residues composted and avoided from landfill	Paper and cardboard recycled and avoided from landfill	Food waste compasted and avoided from landfill	
Data in Metric tons (Mt)	**3887,90**	**212,67**	**2028,51**	**2232,01**	
EF (tCO2e/Metric tons)	1,470054	0,562614	3,239565	0,562614	
Equation: result in tCO_2e	5715,422947	119,648869	6571,496996	1255,760074	
Projects emissions (tCO_2e)					
Description					
Data in Metric tons (Mt)	**0,00**	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,00	0,00	0,00	0,00	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	
Number of PAI attributed	12	12	12	12	
Ownership	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	

Portion to VCS
12406,0

CF1108

Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Others
1	**Evidence provided by client's facility**	**urban biomass**	Mt			679,71	**3887,9**	2 124,75	2 091,33	2 303,49	1 841,62	1 954,31	2 049,87	1 745,98	2 401,89	422,44			
2	**Evidence provided by client's facility**	**Organic wastes (green residues and wood branches)**	Mt			352,224	**212,666**	102,31	224,41	86,6	68,27	307,66	180,1	152,09	97,49	55,57			
3	Evidence provided by client's facility	total wastes recycled	Mt			2376,363	2504,336	1 673,48	1 374,59	1 391,91	1 082,03	1 103,00	1 186,49	1 105,49	1 059,25	1 117,48			
	Will's calculations	% of mixed cardboard paper	%	from Recyc-Quebec 2018 report		81%	81%	71,00%	71,00%	71,00%	71,00%	74,00%	74,00%	74,00%	75,00%	75,00%			
	Will's calculations	**mixed cardboard paper**	Mt			1924,9	**2028,5**	1 188,17	975,96	988,26	768,24	816,22	878	818,06	794,44	838,11			
4	**Evidence provided by client's facility**	**Food waste**	Mt			3820,14	**2232,01**	**320,714**											

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 3 The % of recycling mixed cardboard paper from all volume recycled was selected from Recyc Quebec 2018 report (last report issued)

PAI

CF1201

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Conversion of fuel oil to electricity**	
Inputs (*original name in french*)	Conversion du mazout vers l'électricité	
Baseline emissions (tCO_2e)	128,448909	128,45
Project emissions (tCO_2e)	0,601676	0,60
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	127,847233	**127,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil consumption	
Data in	**46 969,40**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	128,448909	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in	**300 838,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,601676	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1201
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	Others
1	Evidence provided by client's facility	Oil no.2 annual consumption	L		2014	0	46 969,40	
	Evidence provided by client's facility	Annual electricity consumption	kWh		2014	300 838	0	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1204

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch fuel to electricity**	
Inputs (*original name in french*)	Conversion huile no. 2 à électricité	
Baseline emissions (tCO_2e)	21,273511	21,27
Project emissions (tCO_2e)	9,612597	9,61
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	11,660914	**11,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no. 2 consumption	
Data in	**7 779,00**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	21,273511	
Projects emissions (tCO_2e)		
Description	Oil no. 2 consumption after PAI	
Data in	**3 515,00**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	9,612597	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1204
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	Others
1	Evidence provided by the client facility	Oil consumption	L		2014	3 515,00	7 779,00	
	Will's calculation	Equivalent energy	Mj	38.5 MJ/liter			299 491,50	
	Evidence provided by the client facility	Equivalent electricity consumpti	KWh	3.6 Mj/KWh			83 192,08	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 The yearly electricity consumption is really negligeable 16,97% of 1 tCO2e

CF1205

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Fuel switch using biomethanisation**	
Inputs (*original name in french*)	Biomethanisation	
Baseline emissions (tCO_2e)	370,838538	370,84
Project emissions (tCO_2e)	304,645703	304,65
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	66,192835	**66,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Mazout consumption	
Data in	**135 603,05**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	370,838538	
Baseline emissions (tCO_2e)		
Baseline scenario description	Propane consumption	
Data in	**0,00**	
EF (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description	Mazout consumption	
Data in	**92 392,70**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	252,669643	
Projects emissions (tCO_2e)		
Description	Propane consumption	
Data in	**33 663,60**	
EF used (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	51,976060	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1205
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2008	Others
1	Evidence provided by client facility	Propane consumption	L		2008	33 663,60	0,00	
	Evidence provided by client facility	Mazout consumption	L			92 392,70	98 098,00	
	Evidence provided by client facility	Cheese production	Kg			490 177,00	354 604,00	
	Will'calculation	Production increased	%	Reference year = 2008		138%	100%	
	Will'calculation	Adjusted Mazout consumption (Baseline)				135 603,05	98 098,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1207

Traceability realized on each micro-project

2019	Scope 13			Sous-total
PAI	**1**	**2**	**3**	
Inputs (english)	**Urban Biomass Waste**	**Organic Waste**	**Paper/cardboard recycled**	
Inputs (*original name in french*)	Biomasse urbaine	Résidus organiques	Papiers/cartons recyclés	
Baseline emissions (tCO_2e)	792,050395	726,683495	4537,476956	6056,21
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	792,050395	726,683495	4537,476956	**6056,00**
Baseline emissions (tCO_2e)				
Baseline scenario description	Urban biomass composted and avoided from landfill	Organic waste composted and avoided from landfill	Paper and cardboard recycled and avoided from landfill	
Data in Metric tons	**538,79**	**1291,62**	**1400,64**	
EF (tCO2e/Metric tons)	1,470054	0,562614	3,239565	
Equation: result in tCO_2e	792,050395	726,683495	4537,476956	
Projects emissions (tCO_2e)				
Description				
Data in Metric tons	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	
Number of PAI attributed	1	1	1	
Ownership	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	

CF1207
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Natural wood biomass waste	Mt	Bilan GMR 2016 (natural & manufacturated wood)	2012	538,79	
2	Evidence provided by client's facility	Organic wastes (green residues and wood branches)	Mt		2009	1 291,62	
3	Evidence provided by client's facility	total wastes recycled	Mt		2011	1 729,19	
	Will's calculations	% of mixed cardboard paper	%			0,81	
	Will's calculations	mixed cardboard paper	Mt			1 400,64	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 The urban biomass was sent to landfill as recovery material and account fo 0 GES reductions.
The natural wood biomass was proceeded to the compost platform.

PAI 3 % of recycled mixed cardboard and paper is from the Recyc Quebec 2018 report (last report issued)

CF1208

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch from oil to electricity**	
Inputs (*original name in french*)	Conversion huile vers électricité	
Baseline emissions (tCO_2e)	166,096538	166,10
Project emissions (tCO_2e)	2,100384	2,10
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	163,996154	**163,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no. 2 consumption	
Data in	**60 211,30**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	164,662010	
Baseline emissions (tCO_2e)		
Baseline scenario description	Electricity consumption	
Data in	**703 200,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	1,434528	
Projects emissions (tCO_2e)		
Description	Oil no. 2 consumption	
Data in	**0,00**	
EF (tCO2e/Metric tons)	0,002735	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in	**1 029 600,00**	
EF used (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	2,100384	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1208
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	Others
1	Evidence provided by Client's facility	Oil consumption	L	Project realized from 2011 to 2014	2014	*0,00*	60 211	
	Evidence provided by Client's facility	Electricity consumption	KWh			1 029 600,00	703 200	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Decrease of 25% of the sales turnover between 2019 and 2020.

PAI

CF1209

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Conversion from oil heating system to biomass pellet boiler**	
Inputs (*original name in french*)	Conversion du chauffage au mazout en une chaudière à granules	
Baseline emissions (tCO_2e)	13,936215	13,94
Project emissions (tCO_2e)	0,000575	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	13,935639	**13,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no.2 consumption	
Data in L	**5 096,00**	
EF (tCO2e/L)	0,002735	
Equation: result in tCO_2e	13,936215	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in Mt	**16,00**	
EF (tCO2e/Mt)	0,000036	
Equation: result in tCO_2e	0,000575	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1209
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2016	2015	2014	2013	2012	2011	2010	2009	2008	Others
1	Evidence provided by client's facility	Electricity consumption	*KWh*		2016	*51 516,00*	*26 856,00*									
	Evidence provided by client's facility	Biomass consumption	Mt			16,00										
	Evidence provided by client's facility	Oil no.2 consumption	L			0,00	5 096,00									

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Baseline 2016 oil no. 2 consumption was calculated off of 10 delivey tickets.

PAI

CF1210

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Conversion of used oil boiler to biomass boiler to heat greenhouses.**	
Inputs (*original name in french*)	Conversion du chauffage aux huiles usées vers la biomasse	
Baseline emissions (tCO_2e)	667,871298	667,87
Project emissions (tCO_2e)	71,720346	71,72
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	596,150951	**596,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Used oil consumption	
Data in	**275 711,00**	
EF (tCO2e/Metric tons)	0,002422	
Equation: result in tCO_2e	667,871298	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**514,11**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	0,018490	
Projects emissions (tCO_2e)		
Description	Used oil consumption after PAI	
Data in	**29 600,00**	
EF used (tCO2e/Metric tons)	0,002422	
Equation: result in tCO_2e	71,701856	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	18	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	**Biomass is reused and diverted from landfills**	
Inputs (*original name in french*)	Biomasse réutilisée et évitée de l'enfouissement	
Baseline emissions (tCO_2e)	755,769462	755,77
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	755,769462	**755,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Biomass reused and diverted from landfill	
Data in Metric tons (Mt)	**514,11**	
EF (tCO2e/Metric tons)	1,470054	
Equation: result in tCO_2e	755,769462	
Projects emissions (tCO_2e)		
Description		
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Projects emissions (tCO_2e)		
Description	-	
Data in Metric tons (Mt)	**0,00**	
EF used (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**WARM v.15**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1210
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2018	2017	Others
1	Evidence provided by client's facility	Electricity consumption	*KWh*		2017	*158 040,00*	*147 654,00*	*128 386,00*	
	Evidence provided by client's facility	Biomass consumption (wood chips and pellets)	Mt			514,11	658,48	27,25	
	Evidence provided by client's facility	Used oil consumption	L			29 600,00	23 006,00	275 711,00	
	Evidence provided by client's facility	Annual production	sq2	18 greenhouses in 2018		75 000,00	75 000	60 000	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI Baseline used oil consumption **in blue**

PAI Biomass boiler installed and in operation in 2018.

SCOPE 13: Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2018	2017	Others
1	Evidence provided by client's facility	Biomass consumption (wood chips and pellets)	Mt	*diverted from landfill*		514,11	658,48	27,25	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1302

Traceability realized on each micro-project

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Recycling paper/cardboard**	**Organic wastes composted**	
Inputs (*original name in french*)	Recyclage papier/carton collecte sélective	Compostage de matières organiques	
Baseline emissions (tCO_2e)	793,039681	83,261246	876,30
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	793,039681	83,261246	**876,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Paper and carboard recycled and avoided from landfill	Organic waste composted and avoided from landfill	
Data in Metric tons (Mt)	**244,80**	**147,99**	
EF (tCO2e/Metric tons)	3,239565	0,562614	
Equation: result in tCO_2e	793,039681	83,261246	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF1302
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by clients's facility	Recycling paper/cardboard	Mt		2009	244,80	
2	Evidence provided by clients's facility	Organic wastes composted	Mt		2015	147,99	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1	**81%**	**% of recycling paper/carton inside collecte sélective from Recyc Quebec for 2018 and 2019**
	71%	% of recycling paper/carton inside collecte sélective from Recyc Quebec for 2015, 2016 and 2017
	74%	% of recycling paper/carton inside collecte sélective from Recyc Quebec for 2012, 2013 and 2014
	75%	% of recycling paper/carton inside collecte sélective from Recyc Quebec for 2010 and 2011

CF1303

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Switch fuel oil to electricity**	
Inputs (*original name in french*)	Conversion huile no. 2 vers l'électricité	
Baseline emissions (tCO_2e)	80,551649	80,55
Project emissions (tCO_2e)	0,526816	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	80,024833	**80,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Oil no. 2 consumption	
Data in liters	**29 455,00**	
EF (tCO2e/L)	0,002735	
Equation: result in tCO_2e	80,551649	
Projects emissions (tCO_2e)		
Description	Electricity consumption	
Data in kWh	**258 243,00**	
EF (tCO2e/kWh)	0,000002	
Equation: result in tCO_2e	0,526816	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1303
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2015	Others
1	Evidence provided by client's facility	Oil consumption	*L*	Baseline	2015	0,00	29 455,00	
	Evidence provided by client's facility	electricity consumption	kWh			258 243,00	29 620,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1308

Traceability realized on each micro-project

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Composting green residues**	**Composting biomass**	
Inputs (*original name in french*)	Compstage des résidus verts	Compostage de la biomasse	
Baseline emissions (tCO_2e)	1,68784	11,05263	12,74
Project emissions (tCO_2e)	0,00000	0,00000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	1,68784	11,05263	**12,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Green residues composted and avoided from landfill	Biomass composted anf avoided from landfill	
Data in Metric tons (Mt)	**3,00**	**7,00**	
EF (tCO2e/Metric tons)	0,562614	1,578947	
Equation: result in tCO_2e	1,687842	11,052629	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,00	0,00	
Equation: result in tCO_2e	0	0	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF1308
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Vegetal residue composted	Mt	On client's facility ground	2013	3,00	
2	Evidence provided by client's facility	Biomass residue composted (branches, écorces)	Mt	On client's facility ground	2013	7,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1309

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Energy efficiency through greenhouse's thermal screen**	
Inputs (*original name in french*)	Efficacité énergétique par l'installation d'un écran thermique	
Baseline emissions (tCO_2e)	6,312579	6,31
Project emissions (tCO_2e)	4,855830	4,86
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	1,456749	**1,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Propane consumption no thermal screens	
Data in liters	**4 088,50**	
EF (tCO2e/L)	0,001544	
Equation: result in tCO_2e	6,312579	
Projects emissions (tCO_2e)		
Description	Propane consumption with thermal screen	
Data in liters	**3 145,00**	
EF (tCO2e/L)	0,001544	
Equation: result in tCO_2e	4,855830	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13			Sous-total
PAI	1	2	3	
Inputs (english)	**Reutilization of cardboard delivery boxes**	**Reuse of plastic boxes**	**Recuperation and recycling of cardborad packaging**	
Inputs (*original name in french*)	Réutilisation du carton	Réutilisation des boîtes de plastique	Recyclage du carton	
Baseline emissions (tCO_2e)	3,773412	3,765517	10,178300	17,72
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	3,773412	3,765517	10,178300	**17,00**
Baseline emissions (tCO_2e)				
Baseline scenario description	Carboard from delivery reused and avoided from landfill	Plastic boxes reused and avoided from landfill	Cardboard from packaging is recycle and avoided from landfill	
Data in Metric tons (Mt)	**1,25**	**4,37**	**3,38**	
EF (tCO2e/Metric tons)	3,012704	0,862069	3,012704	
Equation: result in tCO_2e	3,773412	3,765517	10,178300	
Projects emissions (tCO_2e)				
Description				
Data in Metric tons (Mt)	**0,00**	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	
Number of PAI attributed	1	1	1	
Ownership	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	

CF1309
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Consumption of propane	*L*		2018	3 145,00	
	Will's calculations	Intensité énergétique	L/$			0,02	
	Will's calculations	Surface de plancher chauffé	m2			1 282,00	
	Will's calculations	Efficacité énergétique	L/m2			2,45	
	Evidence provided by client's facility	Propane consumption without thermal screen	L	Baseline: assuming 30% efficacy of thermal screen		4 088,50	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 116000 Chiffre d'affaire 2017 (voir PJ)
187000 Chiffre d'affaire 2018 (voir PJ)
208000 Chiffre d'affaires 2019
Thermal screen should have reduced propane consumption by 30% in 2018 - 3002L*130%= 3903L

The client has voluntarily increased the heating, and therefore its propane consumption, in its greenhouses in 2018, because of the planting of a new type of crop that required more heat. This was a test for the new crops, to see if an increase in heat would result in a crop production increase. The test failed, and based on the client's comments, propane consumption will have decreased for 2019.

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Total weight of reused cardboard boxes	*Mt*	*from delivery*	2011	1,25	
	Evidence provided by client's facility	Number of cardboard boxes	Unit		2011	835,00	
2	Evidence provided by client's facility	Total weight of reused plastic boxes	Mt		2011	4,37	
	Evidence provided by client's facility	Number of reused plastic boxes per week	Unit		2011	40,00	
3	Evidence provided by client's facility	Total weight of recycled cardboard boxes	Mt	Carboard boxes from packaging	2011	3,38	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 0,0015 Mt/cardboard box
PAI 2 0,0021 Mt/plastic box which is the equivalent weight for a same cardboard boxe
1,82
52 Number of weeks
PAI 3 134,60% Increase of sales

CF1312

Traceability realized on each micro-project

2019	Scope 3			Sous-total
PAI	1	2	3	
Inputs (english)	Quebec top 10 salespoint - switch fuel to biomass	Ontario top 2 salespoint - switch fuel to biomass	USA top 5 salespoint - switch fuel to biomass	
Inputs (*original name in french*)	-	-	-	
Baseline emissions (tCO_2e)	5913,604419	15630,845736	7376,452201	28920,90
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	5913,604419	15630,845736	7376,452201	**28920,00**
Baseline emissions (tCO_2e)				
Baseline scenario description	equivalent oil no.2	equivalent oil no.2	equivalent oil no.2	
Data in	2 162 404,13	5 715 668,98	2 697 317,84	
EF (tCO2e/Metric tons)	0,002735	0,002735	0,002735	
Equation: result in tCO_2e	5913,604419	15630,845736	7376,452201	
Projects emissions (tCO_2e)				
Description	wood pallets	wood pallets	wood pallets	
Data in	4 336,07	11 461,11	5 408,68	
EF (tCO2e/Metric tons)	0,000036	0,000036	0,000036	
Equation: result in tCO_2e	0,155951	0,412210	0,194529	
Source of Emission Factor (EF)	-	-	-	
Sectoral scope	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	PAI I	PAI I	
Number of PAI attributed	10	5	5	
Ownership	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	

2019	Scope 13								
PAI		1	2	3	4	5	6	7	8
Inputs (english)	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass
Inputs (*original name in french*)	-	Client 1	Client 2	Client 3	Client 4	Client 5	Client 6	Client 7	Client 8
Baseline emissions (tCO_2e)	0,000000	1819,159560	0,000000	6832,113480	4527,368640	2572,530840	2485,054080	721,236960	773,008920
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*
Net GHG emission reductions (tCO_2e)	0,000000	1819,159560	0,000000	6832,113480	4527,368640	2572,530840	2485,054080	721,236960	773,008920
Baseline emissions (tCO_2e)									
Baseline scenario description	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill
Data in Metric tons (Mt)	0,00	1019,00	0,00	3827,00	2536,00	1441,00	1392,00	404,00	433,00
EF (tCO2e/Metric tons)	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240
Equation: result in tCO_2e	0,000000	1819,159560	0,000000	6832,113480	4527,368640	2572,530840	2485,054080	721,236960	773,008920
Projects emissions (tCO_2e)									
Description									
Data in Metric tons (Mt)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000
Source of Emission Factor (EF)	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15
Sectoral scope	13	13	13	13	13	13	13	13	13
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No	No
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II
Number of PAI attributed	1	1	1	1	1	1	1	1	1
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.

2019	Scope 13							
PAI	9	10	11	12	13	14	15	16
Inputs (english)	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass
Inputs (*original name in french*)	Client 9	Client 10	Client 11	Client 12	Client 13	Client 14	Client 15	Client 16
Baseline emissions (tCO_2e)	3411,593640	544,498200	0,000000	58,912920	4091,770080	924,754320	303,490800	13053,674880
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*
Net GHG emission reductions (tCO_2e)	3411,593640	544,498200	0,000000	58,912920	4091,770080	924,754320	303,490800	13053,674880
Baseline emissions (tCO_2e)								
Baseline scenario description	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill
Data in Metric tons (Mt)	1911,00	305,00	0,00	33,00	2292,00	518,00	170,00	7312,00
EF (tCO2e/Metric tons)	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240
Equation: result in tCO_2e	3411,593640	544,498200	0,000000	58,912920	4091,770080	924,754320	303,490800	13053,674880
Projects emissions (tCO_2e)								
Description								
Data in Metric tons (Mt)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000
Source of Emission Factor (EF)	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15
Sectoral scope	13	13	13	13	13	13	13	13
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II
Number of PAI attributed	1	1	1	1	1	1	1	1
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.

2019	Scope 13								Sous-total
PAI	17	18	19	20	21	22	23	24	
Inputs (english)	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	Residual/Post-production Biomass	
Inputs (*original name in french*)	Client 17	Client 18	Client 19	Client 20	Client 21	Client 22	Client 23	Client 24	
Baseline emissions (tCO_2e)	1094,352120	365,974200	473,088600	305,276040	765,867960	0,000000	0,000000	0,000000	45123,73
Project emissions (tCO_2e)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	1094,352120	365,974200	473,088600	305,276040	765,867960	0,000000	0,000000	0,000000	**45123,00**
Baseline emissions (tCO_2e)									**3 005**
Baseline scenario description	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	Biomass reused and diverted from landfill	
Data in Metric tons (Mt)	613,00	205,00	265,00	171,00	429,00	0,00	0,00	0,00	Removed from 5th MR
EF (tCO2e/Metric tons)	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	1,785240	
Equation: result in tCO_2e	1094,352120	365,974200	473,088600	305,276040	765,867960	0,000000	0,000000	0,000000	
Projects emissions (tCO_2e)									
Description								-	
Data in Metric tons (Mt)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
EF (tCO2e/Metric tons)	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	0,000000	
Source of Emission Factor (EF)	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	USEPA WARM v.15	-	
Sectoral scope	13	13	13	13	13	13	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI II	PAI	
Number of PAI attributed	1	1	1	1	1	1	1	0	
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	

Submitted to VCS
42118,0

3005 tCO2e
429,2

CF1312
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client facility	Quebec top 10 salespoint - wood pellets			2004	4 336,1	
	Will's calculation	Equivalent oil consumption	L	Baseline		2 162 404,1	
2	Evidence provided by client facility	Ontario top 5 salespoint - wood pellets			2004	11 461,1	
	Will's calculation	Equivalent oil consumption	L	Baseline		5 715 669,0	
3	Evidence provided by client facility	US & New England top 5 salespoint - wood pellets			2004	5 408,7	
	Will's calculation	Equivalent oil consumption	L	Baseline		2 697 317,8	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI	19,2	Mj/kg of dry wood Calorific value of wood pellets
PAI	38,5	Mj/liter Calorific value of oil no.2

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	0,00	
2	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	1 019,00	
3	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	0,00	
4	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	3 827,00	
5	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	2 536,00	
6	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	1 441,00	
7	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	1 392,00	
8	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	404,00	
9	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	433,00	
10	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	1 911,00	
11	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	305,00	
12	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	0,00	
13	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	33,00	
14	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	2 292,00	
15	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	518,00	
16	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	170,00	
17	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	7 312,00	
18	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	613,00	
19	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	205,00	
20	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	265,00	
21	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	171,00	
22	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	429,00	
23	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	0,00	
24	Evidence provided by clients facility	*Confidential*	*Mt*	see compilation client facility sheet	2004	0,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims. **25 276,00**

Assumptions/notes on each PAI's:

PAI

PAI 1 603,15

CF1314

Traceability realized on each micro-project

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	**Composting septic tank sludge**	
Inputs (*original name in french*)	Compostage des boues de fosses septiques	
Baseline emissions (tCO_2e)	5212,35000	5212,35
Project emissions (tCO_2e)	0,00000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	5212,350000	**5212,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Septinc tank sludges composted and avoided from landfill	
Data in Metric tons (Mt)	**2 500,00**	
EF (tCO2e/Metric tons)	2,084940	
Equation: result in tCO_2e	5212,350000	
Projects emissions (tCO_2e)		
Description		
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**CDM-AMS III**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI	
Number of PAI attributed	33	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1314
Ground Data Supply

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Volume of septic tank sludge processed and composted on site	*Mt*	*33 PAI*	2008	2 500,00	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1330

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**2**	
Inputs (english)	**Switch fuel from gasoline to electricity in recreational equipment**	
Inputs (*original name in french*)	Électrification des équipements récréatifs	
Baseline emissions (tCO_2e)	18,889600	18,89
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	18,889600	**18,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Equivalent gasoline	
Data in L	**8 000,00**	
EF (tCO2e/liter)	0,002361	
Equation: result in tCO_2e	18,889600	
Projects emissions (tCO_2e)		
Description	gasoline consumption	
Data in	**0,00**	
EF (tCO2e/m3)	0,002361	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI VIII	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13	Sous-total
PAI	**1**	
Inputs (english)	**Recycling mixed papers**	
Inputs (*original name in french*)	Recyclage du papier mixte	
Baseline emissions (tCO_2e)	65,568796	65,57
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	65,568796	**65,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Mixed paper recycling and avoided from landfill	
Data in Metric tons (Mt)	**20,24**	
EF (tCO2e/Metric tons)	3,239565	
Equation: result in tCO_2e	65,568796	
Projects emissions (tCO_2e)		
Description	recycled paper	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USAEPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF1330
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client's facility	Propane consumption	*L*	*Only evidences*	2013	111251	
	Will's calculations	Conversion in energy used in MJ	MJ	see bottom notes	2013	2815762,81	
	Will's calculations	Diesel equivalent	L	see bottom notes	2013	73518,61123	
2	Evidence provided by client's facility	Number of electric boat engines	Unit		2009	20	
	Evidence provided by client's facility	Gasoline consumption	L	400 liters/year/motor	2009	8000	Baseline

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1 — 25,31 MJ/liters of propane
38,3 MJ/liters of diesel

PAI 2 — 400 liters/motor/year

The increase in propane consumption (2015 and after) is linked to the use of gas stoves. Instead of producing electricity with propane generators to power electric stoves, they have opted for gas stoves.

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	*Evidences provided by client's facility*	Wastes collected for recycling	*cubic yard*			390	
	Will's calculations	Wastes collected for recycling	*M3*			300	
	Will's calculations	Wastes collected	*Mt*			28,5	
	Will's calculations	Portion of wastes collected	*%*			71%	
	Will's calculations	Mixed paper carboard recycled	*Mt*			20,24	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

CF1601

Traceability realized on each micro-project

2019	Scope 3				Sous-total
PAI	1	2	3	4	
Inputs (english)	Switch fuel to biomass dryer 1	Switch fuel to biomass dryer 2	Switch fuel to biomass dryer 3	Switch fuel realized at to dry the woods pellets	
Inputs (*original name in french*)	Conversion à biomasse séchoir 1	Conversion à biomasse séchoir 2	Conversion à biomasse séchoir 3	Conversion vers biomasse clients domestiques biomasse torrifiée	
Baseline emissions (tCO_2e)	1726,634737	1726,634737	1726,634737	6574,822389	11754,73
Project emissions (tCO_2e)	446,770185	446,770185	446,770185	0,198568	1340,51
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	1279,864552	1279,864552	1279,864552	6574,623821	**10414,00**
Baseline emissions (tCO_2e)					
Baseline scenario description	butane consumption	butane consumption	butane consumption	butane consumption	
Data in	957 293,14	957 293,14	957 293,14	3 727 257,38	
EF (tCO2e/Metric tons)	0,001764	0,001764	0,001764	0,001764	
Equation: result in tCO_2e	1688,649777	1688,649777	1688,649777	6574,822389	
Baseline emissions (tCO_2e)					
Baseline scenario description	propane consumption	propane consumption	propane consumption	-	
Data in	24 601,91	24 601,91	24 601,91	0,00	
EF (tCO2e/Metric tons)	0,001544	0,001544	0,001544	0,000000	
Equation: result in tCO_2e	37,984960	37,984960	37,984960	0,000000	
Projects emissions (tCO_2e)					
Description	butane consumption	butane consumption	butane consumption	no	
Common practice	238 943,67	238 943,67	238 943,67	0,00	
EF (tCO2e/Metric tons)	0,001764	0,001764	0,001764	0,000000	
Equation: result in tCO_2e	421,492805	421,492805	421,492805	0,000000	
Projects emissions (tCO_2e)					
Description	propane consumption	propane consumption	propane consumption	no	
Data in	16 215,00	16 215,00	16 215,00	0,00	
EF (tCO2e/Metric tons)	0,001544	0,001544	0,001544	0,000000	
Equation: result in tCO_2e	25,035701	25,035701	25,035701	0,000000	
Projects emissions (tCO_2e)					
Description	biomass consumption	biomass consumption	biomass consumption	biomass consumption	
Data in	6 719,67	6 719,67	6 719,67	5 521,00	
EF used (tCO2e/Metric tons)	0,000036	0,000036	0,000036	0,000036	
Equation: result in tCO_2e	0,241680	0,241680	0,241680	0,198568	
Source of Emission Factor (EF)	**MERN 2019**	**MERN 2019**	**MERN 2019**	**MERN 2019**	
Sectoral scope	3	3	3	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	PAI I	PAI I	PAI I	
Number of PAI attributed	1	1	1	1	
Ownership	Yes	Yes	Yes	Yes	
Chain of custody	Yes	Yes	Yes	Yes	
Others	N.a.	N.a.	N.a.	N.a.	

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	Using bark residus (instead to landfill) to the boiler for the 3 dryers	Using bark residus (instead to landfill) to the production of pellets	
Inputs (*original name in french*)	-	-	
Baseline emissions (tCO_2e)	31829,992573	114674,973243	146504,97
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	31829,992573	114674,973243	**146504,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Bark residues reused and avoided from landfill	Bark resideus reused and avoided from landfill	
Data in Metric tons (Mt)	20159,00	72627,50	
EF (tCO2e/Metric tons)	1,578947	1,578947	
Equation: result in tCO_2e	31829,992573	114674,973243	
Baseline emissions (tCO_2e)			
Baseline scenario description	-	-	
Data in Metric tons (Mt)	0,00	0,00	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	0,00	0,00	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Projects emissions (tCO_2e)			
Description	-	-	
Data in Metric tons (Mt)	0,00	0,00	
EF used (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM v.15**	**USEPA WARM v.15**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	3	50	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF1601
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2008	Others
1 & 3	Evidence provided by client facility	Biomass consumption	TMV		2008	20 159,0		
	Will's calculation	Biomass consumption	TMA	see bottom note	2008	8 870,0		
	Evidence provided by client facility	Butane consumption	L	KL converted to L	2008	716 831,0	2 544 334	
	Evidence provided by client facility	Propane consumption	L	Consumption from CF1+CF2	2008	48 645,0	65 388	
	Evidence provided by client facility	Production intensity	TMP	Réf. 2008 year used in 1st MR (feb. 2014)	2008	101 988 000,0	78 034 000,0	
	Will's calculation	Production intensity	%	Ref. year 2010	2008	112,9%		
5	Evidence provided by client facility	Total wood pellets production	TMA	100% of the output	2012	23 530,0		
	Will's calculation	Biomass required (heat) for torrefaction	TMA	direct data from CF	2012	5 521,0		
	Will's calculation	Biomass required (heat+pellets)	TMA	total 110%	2012	31 956,1		
	Evidence provided by client facility	Wood pellets production	TMA	Year 2013-2015	2012			
	Will's calculation	Equivalent energy	Mj	19,200 Mj/ton of biomass		106 003 200,0		
	Will's calculation	Butane equivalent consumption	L	28.44 Mj/liter		3 727 257,4		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1-3	44%	ratio between TMA (dry) and TMV (green)
PAI 5	10%	of tMA required for heating the pellets

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2008	Others
1	Evidence provided by client facility	Biomass used for dryers	*TMV*			20 159,00		
2	Will's calculations	Torrefied biomass	TMA	biomass required to the pellets (with drying)		72 627,50		
	Will's calculations	Torrefied biomass	TMV					
	Evidence provided by client facility	GHG reduction calculated in Monitoring report from Nov. 2017	tCO2e	correction				

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 1&3	44%	ratio between TMA (dry) and TMV (green)	http://afpq03.ca/wp-content/uploads/2014/06/EQUIVAL.pdf
PAI 5	10%	of tMA required for heating the pellets	

CF1603
Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Heat recovery**	
Inputs (*original name in french*)	Récupération de la chaleur	
Baseline emissions (tCO_2e)	26,849508	26,85
Project emissions (tCO_2e)	13,011257	13,01
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	13,838251	**13,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	natural gas consumption	
Data in	**13 694,00**	
EF (tCO2e/Metric tons)	0,001889	
Equation: result in tCO_2e	25,872348	
Baseline emissions (tCO_2e)		
Baseline scenario description	electricity consumption	
Data in	**479 000,00**	
EF (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	0,977160	
Projects emissions (tCO_2e)		
Description	natural gas consumption	
Data in	**5 924,00**	
EF (tCO2e/Metric tons)	0,001889	
Equation: result in tCO_2e	11,192332	
Projects emissions (tCO_2e)		
Description	electricity consumption	
Data in	**891 630,00**	
EF used (tCO2e/Metric tons)	0,000002	
Equation: result in tCO_2e	1,818925	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI V	
Number of PAI attributed	1	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13		Sous-total
PAI	1	2	
Inputs (english)	**Cellulosic fibers recovery**	**Recycling of mixed plastics**	
Inputs (*original name in french*)	Récupration de fibres cellulosic	Recyclage de plastique mélangé	
Baseline emissions (tCO_2e)	2628,074338	1329,039120	3957,11
Project emissions (tCO_2e)	0,000000	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	*de minimus*	
Net GHG emission reductions (tCO_2e)	2628,074338	1329,039120	**3957,00**
Baseline emissions (tCO_2e)			
Baseline scenario description	Cellulosic fibers recovered and avoided from landfill	Mixed plastics recycled and avoided from landfill	
Data in Metric tons (Mt)	**1787,74**	**1159,72**	
EF (tCO2e/Metric tons)	1,470054	1,146000	
Equation: result in tCO_2e	2628,074338	1329,039120	
Baseline emissions (tCO_2e)			
Baseline scenario description	-	-	
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Projects emissions (tCO_2e)			
Description			
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Projects emissions (tCO_2e)			
Description	-	-	
Data in Metric tons (Mt)	**0,00**	**0,00**	
EF used (tCO2e/Metric tons)	0,000000	0,000000	
Equation: result in tCO_2e	0,000000	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	**USEPA WARM 2020**	
Sectoral scope	13	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	PAI II	
Number of PAI attributed	1	1	
Ownership	Yes	Yes	
Chain of custody	Yes	Yes	
Others	N.a.	N.a.	

CF1603
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	2010	Others
1	Evidence provided by the members	Gaz naturel	M3	see data on 2013-2020 sheet	2014	5 924,00	13 694,00	736,00	
	Evidence provided by the members	Électricité	KWh	see data on 2013-2020 sheet	2010	891 630,00	509 274	479 000,00	
				Intensité de production 100% = 2010	2010				

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

PAI

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	2014	2010	Others
1	Evidence provided by the member	Cellulosic fibers	Mt	see data on 2013-2020 sheet	2010	1 787,74	828,04		
2	Evidence provided by the member	Mixed plastics	Mt	see data on 2013-2020 sheet	2010	1 159,72	433,18		

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 2 EF for mixed plastics (HDPE see RPM environment):

Baseline	1,74
Project	0,594
	1,146

CF0002

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	1	
Inputs (english)	**Switch fuel from propane to biomass**	
Inputs (*original name in french*)	Conversion chauffage des serres du propane vers la biomasse	
Baseline emissions (tCO_2e)	46033,879910	46033,88
Project emissions (tCO_2e)	1,413572	1,41
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	46032,466338	**46032,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Equivalent propane consumption	
Data in	**29 814 998,02**	
EF (tCO2e/Metric tons)	0,001544	
Equation: result in tCO_2e	46033,879910	
Projects emissions (tCO_2e)		
Description	Biomass consumption	
Data in	**39 303,00**	
EF (tCO2e/Metric tons)	0,000036	
Equation: result in tCO_2e	1,413572	
Source of Emission Factor (EF)	**MERN 2019**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI I	
Number of PAI attributed	76	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

2019	Scope 13	Sous-total
PAI	1	
Inputs (english)	**Recycling biomass out of landfill**	
Inputs (*original name in french*)	Valorisation de la biomasse	
Baseline emissions (tCO_2e)	62057,353941	62057,35
Project emissions (tCO_2e)	0,000000	0,00
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	62057,353941	**62057,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Biomass recovered, reused and avoided from landfill	
Data in Metric tons (Mt)	**39 303,00**	
EF (tCO2e/Metric tons)	1,578947	
Equation: result in tCO_2e	62057,353941	
Projects emissions (tCO_2e)		
Description	Valorisation scenario	
Data in Metric tons (Mt)	**0,00**	
EF (tCO2e/Metric tons)	0,000000	
Equation: result in tCO_2e	0,000000	
Source of Emission Factor (EF)	**USEPA WARM 2020**	
Sectoral scope	13	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI II	
Number of PAI attributed	12	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF0002
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by clients facility	Biomass consumption	*Mt*		2011	39 303	
	Will's calculation	Equivalent calorific value	Mj			754 617 600,0	
	Will's calculation	Equivalent propane consumption	L	in blue real consumption before switch boiler & fuel (baseline)		29 814 998,0	
	Evidence provided by clients facility	area of cultivated land	m2			206 080	
	Will's calculation	area of cultivated land	%	area réf. 2010 = 100%		508%	
	Evidence provided by clients facility	Production increased	$			31 073 256,00	
	Will's calculation	Production increased	%	ref. 2012 = 100%		464%	
		Nombre de PAI		*référence déclaré en 4ième cohorte et validé par VVB*	2017	91	
		Nombe d'équivalent de batiment		*référence déclaré en 4ième cohorte et validé par VVB*	2017	79	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI 25,31 Mj/liter of propane

PAI 19,2 Mj/kg of biomass 1000

We assume, with a conservative approach, considering the higher combustion efficiency of propane and by the use of thermal screens that the biomass input is considered with low humidity (less than 5%)

SCOPE 13: Methane Avoidance/Waste

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by client facility	Biomass diverted from landfill and reused	*Mt*		2011	39 303	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI

CF0003

Traceability realized on each micro-project

2019	Scope 3	Sous-total
PAI	**1**	
Inputs (english)	**Saving energy on recycling activities**	
Inputs (*original name in french*)	Énergie conservée dans les activités de recyclage	
Baseline emissions (tCO_2e)	90053,560300	90053,56
Project emissions (tCO_2e)	121,801933	121,80
Leakage emissions (tCO_2e)	*de minimus*	
Net GHG emission reductions (tCO_2e)	89931,758367	**89931,00**
Baseline emissions (tCO_2e)		
Baseline scenario description	Metal material	
Data in	**1 996 753,00**	
EF (tCO2e/Metric tons)	0,0451	
Equation: result in tCO_2e	90053,560300	
Projects emissions (tCO_2e)		
Description	Recycling of metal	
Data in	**1 996 753,00**	
EF (tCO2e/Metric tons)	0,000061	
Equation: result in tCO_2e	121,801933	
Source of Emission Factor (EF)	**Eckalmana et al.**	
Sectoral scope	3	
Additionnality *(refer to section 2.3 of the Monitoring Report)*	Yes	
Common practice *(refer to section 2.3 of the Monitoring Report)*	No	
Association to a generic PAI *(refer to section 2.3 of the Monitoring Report)*	PAI IV	
Number of PAI attributed	34	
Ownership	Yes	
Chain of custody	Yes	
Others	N.a.	

CF0003
Ground Data Supply

SCOPE 3: Energy Efficiency

PAI	Data Source*	Data Description	Unit	Comments	Baseline	2019	Others
1	Evidence provided by clients's facilit	Volume of recycled metal material	*Kg*	*FeTi (FerTitane)*	2008	1 996 753,0	

* The evidence provided by the client's facility was further assessed and confirmed by Will's audit, on a sample size basis to ascertain reduction claims.

Assumptions/notes on each PAI's:

PAI	Life cycle; Page 11	45,1	kg eCO2/kg as baseline Emission factor
PAI	Life cycle; Page 14	0,061	kg eCO2/kg as project Emission factor
		68%	Taux de Titane dans le FeTi

5 grades de produits (Standard, medium, Small, Fines and Owder)
37 clients acheteurs distincts en 2013
Confidential reference removed
Confidential reference removed

Life Cycle Carbon Benefits of Aerospace Alloy Recycling, Matthew J. Eckelmana, Luca Ciaccib, Goksin Kavlakc, Philip Nussb, Barbara K. Reckb, T.E. Graedelb page 11 (baseline) page 14 (projects émission)