

Annex C

## Construction Programme of the Project

#	Activity Name	BL Project Duration	BL Project Start	BL Project Finish	Remaining Duration	Start	Finish	% Complete	Variance - BL Project Finish Date	2015												2016												2017											
										Nov	Dec	Jan	F	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	N	Dec	Jan	F	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	<b>Contract No. EP/SP/61/10 - v1.4, Progress updated on 17Mar17 ***</b>	688d	20-Nov-14	17-Mar-17	210d	20-Nov-14 A	01-Dec-17		-210d																																				
2	<b>Preliminary and Site Establishment</b>	200d	20-Nov-14	27-Jul-15	0d	20-Nov-14 A	19-Oct-16 A		-366d																																				
3	Preliminary and Site Establishment	200d	20-Nov-14	27-Jul-15	0d	20-Nov-14 A	19-Oct-16 A	100%	-366d																																				
4	<b>Design</b>	308d	20-Nov-14	03-Dec-15	60d	20-Nov-14 A	05-Jun-17		-441d																																				
5	Design Criteria and Design Preparation	80d	20-Nov-14	27-Feb-15	0d	20-Nov-14 A	01-Sep-15 A	100%	-151d																																				
6	Detailed Design Submission (DDS) - General, Civil, ABWF and Landscape	236d	19-Dec-14	03-Dec-15	49d	18-Dec-14 A	02-Jun-17	99.55%	-367d																																				
7	Detailed Design Submission (DDS) - Building 1	0d			0d	13-Apr-15 A	27-Jul-16 A	100%																																					
8	Detailed Design Submission (DDS) - Building 2	0d			0d	12-Mar-15 A	07-Apr-16 A	100%																																					
9	Detailed Design Submission (DDS) - Building 3	0d			0d	20-Jul-15 A	30-Mar-16 A	100%																																					
10	Detailed Design Submission (DDS) - Auxiliary Buildings & Facilities	0d			0d	11-Feb-15 A	08-Aug-16 A	100%																																					
11	Detailed Design Submission (DDS) - E&M and BS	216d	18-Dec-14	04-Nov-15	50d	18-Dec-14 A	05-Jun-17	99.63%	-389d																																				
12	<b>Procurement</b>	507d	12-Feb-15	02-Jul-16	146d	01-Mar-15 A	10-Aug-17		-404d																																				
13	Procurement, Manufacturing, F.A.T., Shipment & Delivery of E&M Systems Equipment	507d	12-Feb-15	02-Jul-16	146d	01-Mar-15 A	10-Aug-17	93.05%	-404d																																				
14	<b>Construction</b>	489d	13-May-15	31-Dec-16	199d	04-May-15 A	17-Nov-17		-260d																																				
15	Construction of Building #1 (Waste Receiving, Pre-treatment & Administration)	178d	19-Aug-15	23-Mar-16	81d	02-Sep-15 A	28-Jun-17	98.89%	-372d																																				
16	Construction of Building #2 (Composting & Maturation, and Link Bridge)	262d	23-May-15	11-Apr-16	6d	16-Jun-15 A	24-Mar-17	87.13%	-285d																																				
17	Construction of Building #3 (Energy Centre)	0d			0d	24-Mar-16 A	24-Oct-16 A	100%																																					
18	Construction of Auxiliary Buildings & Facilities	263d	13-May-15	31-Mar-16	38d	04-May-15 A	08-May-17	93.33%	-325d																																				
19	ABWF, Finishing and Fitting-out Works to Building #1, #2, #3 and Auxiliary Buildings & Facilities	303d	23-Dec-15	31-Dec-16	181d	21-Mar-16 A	26-Oct-17	51.56%	-242d																																				
20	Sitewide, Boundary Wall, Landscaping and Roadworks	396d	02-Sep-15	31-Dec-16	199d	13-Nov-15 A	17-Nov-17	66.94%	-260d																																				
21	Statutory and Utilities Works	148d	04-Mar-16	06-Oct-16	176d	02-Nov-16 A	20-Oct-17	42.32%	-308d																																				
22	<b>E&amp;M and Building Services Installation</b>	244d	04-Feb-16	30-Nov-16	128d	11-May-16 A	23-Aug-17		-214d																																				
23	E&M Installation - Mechanical	244d	04-Feb-16	30-Nov-16	117d	11-May-16 A	10-Aug-17	55.5%	-203d																																				
24	E&M Installation - Piping	0d			105d	28-Nov-16 A	27-Jul-17	10.84%																																					
25	E&M Installation - Electrical, Instrumentation & Control	0d			119d	28-Sep-16 A	12-Aug-17	24.41%																																					
26	Building Services Installation	0d			128d	24-Jun-16 A	23-Aug-17	29.65%																																					
27	Energisation of Switchboards / MCC with SAT	1d	28-Jul-16	28-Jul-16	59d	02-Feb-17 A	02-Jun-17	36.36%	-249d																																				
28	<b>Testing &amp; Commissioning and Completion</b>	232d	29-Jul-16	17-Mar-17	188d	27-May-17	01-Dec-17		-258d																																				
29	Pre-Commissioning	189d	29-Jul-16	16-Mar-17	88d	27-May-17	22-Aug-17	0%	-159d																																				
30	Process Commissioning, Performance & Acceptance Testing	0d			113d	10-Aug-17	30-Nov-17	0%																																					
31	Completion of the Design and the Works including Testing and Commissioning (Extended Completion Date: 9-Jun-17 noon)	0d		16-Mar-17	0d		30-Nov-17*	0%	-259d																																				
32	Commencement of the Operation	0d	17-Mar-17		0d	01-Dec-17*		0%	-258d																																				

#	Activity Name	BL Project Duration	BL Project Start	BL Project Finish	Remaining Duration	Start	Finish	% Complete	Variance - BL Project Finish Data	2015												2016												2017											
										Nov	Dec	Jan	F	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	N	Dec	Jan	F	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	<b>Contract No. EP/SP/61/10 - v1.4, Progress updated on 17Apr17***</b>	688d	20-Nov-14	17-Mar-17	188d	20-Nov-14 A	01-Dec-17		-210d																																				
2	<b>Preliminary and Site Establishment</b>	200d	20-Nov-14	27-Jul-15	0d	20-Nov-14 A	19-Oct-16 A		-366d																																				
3	Preliminary and Site Establishment	200d	20-Nov-14	27-Jul-15	0d	20-Nov-14 A	19-Oct-16 A	100%	-366d																																				
4	<b>Design</b>	308d	20-Nov-14	03-Dec-15	58d	20-Nov-14 A	27-Jun-17		-460d																																				
5	Design Criteria and Design Preparation	80d	20-Nov-14	27-Feb-15	0d	20-Nov-14 A	01-Sep-15 A	100%	-151d																																				
6	Detailed Design Submission (DDS) - General, Civil, ABWF and Landscape	236d	19-Dec-14	03-Dec-15	42d	18-Dec-14 A	19-Jun-17	99.87%	-378d																																				
7	Detailed Design Submission (DDS) - Building 1	0d			0d	13-Apr-15 A	27-Jul-16 A	100%																																					
8	Detailed Design Submission (DDS) - Building 2	0d			0d	12-Mar-15 A	07-Apr-16 A	100%																																					
9	Detailed Design Submission (DDS) - Building 3	0d			0d	20-Jul-15 A	30-Mar-16 A	100%																																					
10	Detailed Design Submission (DDS) - Auxiliary Buildings & Facilities	0d			0d	11-Feb-15 A	08-Aug-16 A	100%																																					
11	Detailed Design Submission (DDS) - E&M and BS	216d	18-Dec-14	04-Nov-15	48d	18-Dec-14 A	27-Jun-17	99.69%	-405d																																				
12	<b>Procurement</b>	507d	12-Feb-15	02-Jul-16	141d	01-Mar-15 A	05-Sep-17		-430d																																				
13	Procurement, Manufacturing, F.A.T., Shipment & Delivery of E&M Systems Equipment	507d	12-Feb-15	02-Jul-16	141d	01-Mar-15 A	05-Sep-17	93.81%	-430d																																				
14	<b>Construction</b>	489d	13-May-15	31-Dec-16	180d	04-May-15 A	21-Nov-17		-263d																																				
15	Construction of Building #1 (Waste Receiving, Pre-treatment & Administration)	178d	19-Aug-15	23-Mar-16	46d	02-Sep-15 A	13-Jun-17	99.31%	-359d																																				
16	Construction of Building #2 (Composting & Maturation, and Link Bridge)	262d	23-May-15	11-Apr-16	0d	16-Jun-15 A	24-Mar-17 A	100%	-285d																																				
17	Construction of Building #3 (Energy Centre)	0d			0d	24-Mar-16 A	24-Oct-16 A	100%																																					
18	Construction of Auxiliary Buildings & Facilities	263d	13-May-15	31-Mar-16	71d	04-May-15 A	13-Jul-17	95.24%	-380d																																				
19	ABWF, Finishing and Fitting-out Works to Building #1, #2, #3 and Auxiliary Buildings & Facilities	303d	23-Dec-15	31-Dec-16	166d	21-Mar-16 A	04-Nov-17	57.86%	-249d																																				
20	Sitewide, Boundary Wall, Landscaping and Roadworks	396d	02-Sep-15	31-Dec-16	180d	13-Nov-15 A	21-Nov-17	68.59%	-263d																																				
21	Statutory and Utilities Works	148d	04-Mar-16	06-Oct-16	156d	02-Nov-16 A	23-Oct-17	50.67%	-310d																																				
22	<b>E&amp;M and Building Services Installation</b>	244d	04-Feb-16	30-Nov-16	139d	11-May-16 A	30-Sep-17		-247d																																				
23	E&M Installation - Mechanical	244d	04-Feb-16	30-Nov-16	116d	11-May-16 A	04-Sep-17	66.34%	-224d																																				
24	E&M Installation - Piping	0d			71d	28-Nov-16 A	13-Jul-17	23.73%																																					
25	E&M Installation - Electrical, Instrumentation & Control	0d			139d	28-Sep-16 A	30-Sep-17	30.04%																																					
26	Building Services Installation	0d			122d	24-Jun-16 A	11-Sep-17	46.56%																																					
27	Energisation of Switchboards / MCC with SAT	1d	28-Jul-16	28-Jul-16	37d	02-Feb-17 A	02-Jun-17	61.98%	-249d																																				
28	<b>Testing &amp; Commissioning and Completion</b>	232d	29-Jul-16	17-Mar-17	221d	24-Apr-17	01-Dec-17		-258d																																				
29	Pre-Commissioning	189d	29-Jul-16	16-Mar-17	111d	24-Apr-17	12-Aug-17	0%	-149d																																				
30	Process Commissioning, Performance & Acceptance Testing	0d			113d	10-Aug-17	30-Nov-17	0%																																					
31	Completion of the Design and the Works including Testing and Commissioning (Extended Completion Date: 9-Jun-17 noon)	0d		16-Mar-17	0d		30-Nov-17*	0%	-259d																																				
32	Commencement of the Operation	0d	17-Mar-17		0d	01-Dec-17*		0%	-258d																																				

#	Activity ID	Activity Name	BL Project Duration	BL Project Start	BL Project Finish	Remaining Duration	Start	Finish	% Complete	Variance - BL Project Finish Date	2015												2016												2017												2018			
											N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F	M	A	M	J	Jul	A	S	O	N	D	J	F
1	<b>Contract No. EP/SP/61/10 - v1.4, Progress updated on 17May17 ***</b>																																																	
2	<b>Preliminary and Site Establishment</b>																																																	
3	ESum110	Preliminary and Site Establishment	217d	20-Nov-14	15-Aug-15	0d	20-Nov-14 A	19-Oct-16 A	100%	-349d																																								
4	<b>Design</b>																																																	
5	ESum120	Design Criteria and Design Preparation	80d	20-Nov-14	27-Feb-15	0d	20-Nov-14 A	01-Sep-15 A	100%	-151d																																								
6	ESum130	Detailed Design Submission (DDS) - General, Civil, ABWF and Landscape	289d	19-Dec-14	23-Feb-16	47d	18-Dec-14 A	24-Jul-17	99.91%	-350d																																								
7	ESum132	Detailed Design Submission (DDS) - Building 1	151d	21-Apr-15	25-Nov-15	0d	13-Apr-15 A	27-Jul-16 A	100%	-164d																																								
8	ESum134	Detailed Design Submission (DDS) - Building 2	158d	12-Mar-15	30-Oct-15	0d	12-Mar-15 A	07-Apr-16 A	100%	-106d																																								
9	ESum136	Detailed Design Submission (DDS) - Building 3	103d	03-Jun-15	29-Oct-15	0d	20-Jul-15 A	30-Mar-16 A	100%	-102d																																								
10	ESum138	Detailed Design Submission (DDS) - Auxilliary Buildings & Facilities	177d	10-Feb-15	29-Oct-15	0d	11-Feb-15 A	08-Aug-16 A	100%	-191d																																								
11	ESum140	Detailed Design Submission (DDS) - E&M and BS	216d	18-Dec-14	04-Nov-15	48d	18-Dec-14 A	25-Jul-17	99.73%	-425d																																								
12	<b>Procurement</b>																																																	
13	ESum150	Procurement, Manufacturing, F.A.T., Shipment & Delivery of E&M Systems Equipment	507d	12-Feb-15	02-Jul-16	101d	01-Mar-15 A	26-Aug-17	95.34%	-420d																																								
14	<b>Construction</b>																																																	
15	ESum160	Construction of Building #1 (Waste Receiving, Pre-treatment & Administration)	178d	19-Aug-15	23-Mar-16	49d	02-Sep-15 A	15-Jul-17	99.31%	-386d																																								
16	ESum170	Construction of Building #2 (Composting & Maturation, and Link Bridge)	262d	23-May-15	11-Apr-16	0d	16-Jun-15 A	24-Mar-17 A	100%	-285d																																								
17	ESum175	Construction of Building #3 (Energy Centre)	87d	30-Oct-15	15-Feb-16	0d	24-Mar-16 A	24-Oct-16 A	100%	-205d																																								
18	ESum180	Construction of Auxilliary Buildings & Facilities	263d	13-May-15	31-Mar-16	40d	04-May-15 A	05-Jul-17	96.74%	-373d																																								
19	ESum190	ABWF, Finishing and Fitting-out Works to Building #1, #2, #3 and Auxilliary Buildings & Facilities	303d	23-Dec-15	31-Dec-16	162d	21-Mar-16 A	28-Nov-17	62.32%	-269d																																								
20	ESum200	Sitewide, Boundary Wall, Landscaping and Roadworks	383d	17-Sep-15	31-Dec-16	159d	13-Nov-15 A	24-Nov-17	70.72%	-266d																																								
21	ESum210	Statutory and Utilities Works	148d	04-Mar-16	06-Oct-16	149d	02-Nov-16 A	13-Nov-17	52.25%	-327d																																								
22	<b>E&amp;M and Building Services Installation</b>																																																	
23	ESum220	E&M Installation - Mechanical	164d	04-Feb-16	25-Aug-16	92d	11-May-16 A	04-Sep-17	73.5%	-304d																																								
24	ESum222	E&M Installation - Piping	144d	24-May-16	12-Nov-16	84d	28-Nov-16 A	25-Aug-17	44.07%	-231d																																								
25	ESum224	E&M Installation - Electrical, Instrumentation & Control	181d	02-Apr-16	08-Nov-16	115d	28-Sep-16 A	30-Sep-17	33.14%	-266d																																								
26	ESum226	Building Services Installation	125d	18-Apr-16	14-Sep-16	114d	24-Jun-16 A	29-Sep-17	57.63%	-309d																																								
27	ESum230	Energisation of Switchboards / MCC with SAT	1d	28-Jul-16	28-Jul-16	8d	02-Feb-17 A	26-May-17	89.74%	-244d																																								
28	<b>Testing &amp; Commissioning and Completion</b>																																																	
29	ESum240	Pre-Commissioning	144d	29-Jul-16	19-Jan-17	157d	24-Apr-17 A	21-Oct-17	1%	-275d																																								
30	ESum250	Process Commissioning, Performance & Acceptance Testing	119d	22-Oct-16	16-Mar-17	160d	23-Oct-17	31-Mar-18	0%	-380d																																								
31	PS900955	Substantial Completion - 100 Tons/Day	0d			0d	30-Nov-17																																											
32	PS900957	Soft Opening / Operation of Plant	0d			0d	30-Nov-17																																											
33	KD110310	Remaining Works to Achieve Plant Operation at Full Capacity	0d			0d		31-Mar-18*	0%																																									
34	KD110330	Plant Operation at Full Capacity	0d			0d		01-Apr-18*	0%																																									