KPI LIST (post issue) GREEN BOND ISSUED 2017-MATURITY 2027 (ISIN XS1704789590)

Business Unit	n.	Project Description	Eligible Green Category	Eligible Category (DNV)	KPI	UM	2006/2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 FINAL	2018 FINAL	2019 FINAL	2020 FINAL	2021 FINAL	FINAL 2022	2023	2024	2025	2026	2027
WASTE MANAGEMENT	1	Waste to energy plant for Heat Production in Parma	Energy Efficiency	Cogeneration facilities	PES Primary Energy Saving Indicator per operating year	%									11	17	17	13	26	28	28	25	28	28	28	28	28
					Renewable energy share in percent on total	%									27	49	50	49	49	49	50	50	50	50	50	50	50
					Thermal energy recovered from waste to Parma DH network in MWh per operating year	GWh									103	130	131	133	141	146	150	130	143	143	143	146	143
	2	Waste to energy plant for Heat Production in Piacenza	Energy Efficiency	Cogeneration facilities	PES Primary Energy Saving Indicator per operating year	%															25	25	25	25	25	25	25
					Renewable energy share in percent on total	%															43	44	43	43	43	43	43
					Thermal energy recovered from waste to Piacenza DH network in MWh per operating year	GWh															13	33	40	41	41	41	55
	3	Development of separate waste collection services	Waste management efficiency and recycling	Waste collection and sorting upgrades	Total sorted waste collection	t						635.724	644.444	675.610	721.788	737.163	711.911	788.313	813.804	825.674	856.682	836.095	880.955	887.734	888.132	888.542	888.999
					Total of non sorted waste disposed	t						550.903	528.100	503.896	484.128	488.426	464.837	445.411	415.905	371.735	366.570	353.871	323.616	318.309	309.268	300.252	291.184
					Sorted waste collection %	%						54%	55%	57%	60%	60%	60%	64%	66%	69%	70%	70%	73%	74%	74%	75%	75%
ENERGY	4	Accumulators district heating Bit (TO)	Energy Efficiency	Energy distribution and management	Primary energy saving per operating year	MWh										3.855	9.201	10.723	13.001	10.082	18.116	22.818	12.616	10.623	9.884	12.197	13.091
					Avoided CO_2 emissions from fossil sources per operating year	t										758	1.809	1.752	2.124	1.647	2.960	3.585	2.480	2.088	1.943	2.398	2.574
	5	Accumulators district heating Martinetto (TO)	Energy Efficiency	Energy distribution and management	Primary energy saving per operating year	MWh										19.261	18.403	21.446	26.002	20.163	36.232	40.978	25.231	21.245	19.767	24.394	26.182
					Avoided CO_2 emissions from fossil sources per operating year	t										3.787	3.618	3.504	4.248	3.294	5.919	6.439	4.960	4.177	3.886	4.796	5.147
	6	Accumulators district heating Mirafiori Nord (TO)	Energy Efficiency	Energy distribution and management	Primary energy saving per operating year	MWh																15.377	12.616	10.623	9.884	12.197	13.091
					Electrical energy produced from renewable non-fossil sources per operating year	MWh																105	59	59	59	59	59
					Thermal energy produced from renewable non-fossil sources per operating year	MWh																213	150	150	150	150	150
					Avoided CO_2 emissions from fossil sources per operating year	t																2.415	2.480	2.088	1.943	2.398	2.574
	7	Heat exchange and pumping substation in Lucento	Energy Efficiency	Energy distribution and management	Electrical energy produced from renewable non-fossil sources per operating year	MWh																	37	37	37	37	37
					Avoided CO_2 emissions from fossil sources per operating year	t																	9	9	9	9	9
	8	Heat exchange and pumping TRM in Grugliasco and interconnection with Grugliasco and Beinasco	Energy Efficiency	Energy distribution and management	Avoided CO_2 emissions from fossil sources per operating year	t													82	7.045	24.605	28.015	15.935	22.016	22.287	24.619	26.644
					Distributed thermal energy per operating year	MWh													384	35.069	122.490	138.819	74.792	103.336	104.607	115.553	125.056
	9	Piacenza district heating network, connection and pumping station at WTE	Renewable energy	Energy network development	Avoided CO_2 emissions from fossil sources per operating year	t						2.384	2.506	2.104	2.504	2.738	5.617	1.874	2.080	2.037	3.861	4.027	5.516	5.716	5.905	6.032	2.748
					Distributed thermal energy per operating year	MWh						32.706	34.389	28.873	34.361	37.568	47.019	43.619	43.016	44.807	51.853	46.890	62.888	64.396	65.574	66.231	66.231
	10	Parma district heating network	Renewable energy	Energy network development	Primary energy saving per operating year	MWh						12.813	5.733	81.696	114.868	144.524	143.372	141.785	149.810	137.588	161.987	128.134	150.656	150.559	150.610	154.146	151.600
					Avoided CO_2 emissions from fossil sources per operating year	t						4.326	1.551	16.856	23.614	29.523	29.165	28.934	30.099	28.680	32.470	25.840	30.089	30.075	30.082	30.812	30.289
					Distributed thermal energy per operating year	MWh						176.797	176.815	159.146	188.688	196.691	194.389	190.364	187.274	183.355	218.172	174.725	201.848	200.696	201.292	201.733	201.733
	11	District heating networks development in Torino	Renewable energy	Energy network development	Primary energy saving per operating year	MWh						2.794.000	2.889.000	2.270.000	2.733.000	2.997.000	3.400.000	2.998.000	2.546.000	1.900.427	2.229.644	2.363.978	2.454.342	2.369.398	2.286.405	2.397.951	2.454.309
					Avoided CO_2 emissions from fossil sources per operating year	t						1.007.686	1.092.546	795.595	933.086	1.026.775	1.046.376	876.667	873.083	670.711	668.674	583.414	574.120	524.000	473.302	459.458	433.901
					Distributed thermal energy per operating year	MWh						2.192.000	2.312.000	1.990.000	2.109.000	2.205.000	2.307.366	2.168.838	2.132.541	2.242.779	2.418.766	2.438.117	2.439.287	2.296.926	2.142.925	2.255.980	2.324.624
	12	District heating networks development in Reggio Emilia	Renewable energy	Energy network development	Primary energy saving per operating year	MWh						91.780	92.595	93.365	93.883	94.065	120.327	114.281	132.038	63.581	105.410	76.783	109.587	110.487	111.837	111.962	111.962
					Avoided CO_2 emissions from fossil sources per operating year	t						33.289	33.585	33.864	34.052	34.118	47.097	31.056	43.307	23.049	29.717	17.873	24.255	22.893	21.587	20.058	18.534
					Distributed thermal energy per operating year	MWh						456.566	285.767	384.325	409.932	402.057	407.335	413.484	416.942	385.991	455.245	388.624	387.323	385.673	385.858	386.394	386.394
	13	Mini Hydro La Loggia (TO)	Renewable energy	Mini hydro power	Electrical energy produced from renewable non-fossil sources per operating year	MWh									2.733	3.537	3.343	2.638	3.402	2.513	3.008	1.104	3.504	3.514	3.504	3.504	3.504
					Avoided CO_2 emissions from fossil sources per operating year	t									1.403	1.816	1.644	1.262	1.630	1.149	1.360	490	1.619	1.517	1.493	1.462	1.436
	16	Enia Solaris photovoltaic plants near Brindisi	Renewable energy	Solar PV energy generation	Net produced electricity from renewable non-fossil sources per operating year	kWh						6.813.750	6.290.625	6.721.427	7.051.488	6.826.286	7.370.000	6.667.000	7.137.000	7.318.233	6.802.800	6.847.000	7.300.000	7.300.000	7.300.000	7.300.000	7.300.000
					Avoided CO_2 emissions from fossil sources per operating year	t						3.491	3.223	3.444	3.613	3.498	3.624	3.188	3.419	3.345	3.077	3.037	3.160	3.103	3.047	2.992	2.938
NETWORKS	17	Improvement of Genova plants	Waste water treatment	Wastewater treatment plant upgrades	Treated population equivalent (potential)	N						160.000	160.000	196.000	196.000	196.000	236.000	236.000	236.000	326.000	326.000	331.000	421.000	421.000	461.000	511.000	511.000
	18	Improvement of Reggio Emilia plants	Waste water treatment	Wastewater treatment plant upgrades	Volumes of water destined to irrigation re-usage / Volumes of total treated water	%											30%	30%	32%	31%	32%	41%	30%	30%	30%	30%	30%
					Treated population equivalent (potential)	N						19.350	19.350	19.350	20.250	20.250	24.250	24.250	31.750	31.750	31.750	31.750	31.750	39.850	39.850	39.850	39.850
	19	Improvement of Piacenza plants	Waste water treatment	Wastewater treatment plant upgrades	Treated population equivalent (potential)	N						17.360	17.360	17.360	19.500	19.500	23.500	23.500	23.500	23.500	23.500	23.500	23.500	23.500	23.500	23.500	23.500
	20	Improvement of Parma plants	Waste water treatment	Wastewater treatment plant upgrades	Treated population equivalent (potential)	N						10.400	10.400	11.650	11.650	11.900	11.900	11.900	11.900	14.250	14.250	14.250	14.250	14.500	14.500	14.500	14.500
	21	Cogeneration turboexpansion plant "Celsius"	Energy Efficiency	Cogeneration facilities	Net produced electricity from renewable non-fossil sources per operating year	kWh											25.129	45.618	657.567	0	878.000	1.897.000	2.381.400	2.381.400	2.381.400	2.381.400	2.381.400
					Avoided CO_2 emissions from fossil sources per operating year	t											12	22	315	0	397	841	1.031	1.012	994	976	958
	22	Hydroelectric investments	Renewable energy	Mini hydro power	Net produced electricity from renewable non-fossil sources per operating year	kWh	23.238.000	23.238.000	23.238.000	24.699.000	25.916.000	32.653.000	40.118.220	44.540.598	30.996.087	30.504.404	24.898.000	32.163.539	31.335.402	32.053.738	33.019.818	20.240.894	30.206.536	30.206.536	30.206.536	30.206.536	30.206.536
					Avoided CO_2 emissions from fossil sources per operating year	t	11.930	11.930	11.930	12.680	13.305	16.763	20.596	22.866	15.912	15.660	12.245	15.381	15.010	14.650	14.934	8.977	13.074	12.839	12.608	12.381	12.158