

KPI LIST (post issue) GREEN BOND ISSUED 2018-MATURITY 2025 (ISIN XS1881533563)

Business Unit	n	Project Description	Eligible Green Category	Eligible Category (DNV)	KPI	UM	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 FINAL	2018 FINAL	2019 FINAL	2020	2021	2022							
WASTE MANAGEMENT	1	Revamping Saliceti plant owned by Recos company (WDF recovery)	Waste management efficiency and recycling	Waste collection and sorting upgrades	Waste-derived fuel (WDF) per operating year	t										7.886	2.585	16.523	29.811	29.811	29811							
					Percentage of WDF on total treated waste per operating year	%														10%	5%	32%	29%	29%	29%			
ENERGY	2	Accumulators district heating in San Salvario (TO)	Energy efficiency	Energy distribution and management	Primary energy saving per operating year	MWh															5.824	12.395	11.488					
					Electrical energy produced from renewable non-fossil sources per operating year	MWh																			18,30	18,30	18,30	
					Avoided CO2 emissions from fossil sources per operating year	t																				1.145	2.437	2.259
					Avoided CO2 emissions from fossil sources per operating year by photovoltaic plant	t																					9,37	9,37
	3	Accumulators district heating in Piacenza (PC)	Energy efficiency	Energy distribution and management	Primary energy saving per operating year	MWh																	3.180	3.180	3.180			
					Avoided CO2 emissions from fossil sources per operating year	t																				625	625	625
	4	Accumulators district heating in Parma (PR)	Energy efficiency	Energy distribution and management	Primary energy saving per operating year	MWh																	3.180	3.180	3.180			
					Avoided CO2 emissions from fossil sources per operating year	t																				625	625	625
	5	Accumulators district heating in Reggio Emilia (RE)	Energy efficiency	Energy distribution and management	Primary energy saving per operating year	MWh																	10.407	10.407	10.407			
					Avoided CO2 emissions from fossil sources per operating year	t																				2.046	2.046	2.046
	6	San Mauro/Diga del Pascolo Mini Hydro plant	Renewable energy	Mini hydro power	Electrical energy produced from renewable non-fossil sources per operating year	MWhe																		6.700	6.700			
					Avoided CO2 emissions from fossil sources per operating year	t																					3.430	3.430
	7	Cogeneration plant Torino Nord	Energy efficiency	Cogeneration facilities	Electrical energy produced per operating year	MWhe						1.432.728	1.894.130	1.080.072	2.200.788	2.133.545	2.002.201	2.079.471	2.041.630	1.865.459	1.820.532	1.820.931						
					Thermal energy produced per operating year	MWht						453.069	474.766	419.311	1.092.632	1.030.891	958.458	1.013.481	907.646	1.092.247	1.088.406	1.102.496						
					Primary energy saving per operating year	MWh						574.353	796.823	471.970	1.396.716	1.308.017	1.226.699	1.263.239	987.121	1.361.210	1.348.095	1.363.535						
					Avoided CO2 emissions from fossil sources per operating year	t						211.482	289.447	169.483	426.318	413.253	397.432	361.382	331.455	385.577	363.262	366.492						
	8	Valle Orco hydroelectric plants	Renewable energy	Mini hydro power	Electrical energy produced from renewable non-fossil sources per operating year	MWhe						659.800	835.100	657.100	744.894	607.942	647.139	785.192	713.006	633.055	633.055	633.055						
					Avoided CO2 emissions from fossil sources per operating year	t						212.358	318.999	196.644	506.814	457.165	397.432	375.498	341.537	376.466	376.466	376.466						
	9	VDE hydroelectric plants (Chiomonte- Susa) Repowering project	Renewable energy	Mini hydro power	Electrical energy produced from renewable non-fossil sources per operating year	MWhe						56.140	72.690	62.690	62.831	60.034	59.818	57.263	903	19.030	19.030	19.030						
					Avoided CO2 emissions from fossil sources per operating year	t						27.643	36.882	32.407	33.198	30.760	29.418	27.384	433	9.359	9.359	9.359						
10	Cogeneration plant Moncalieri – GT2 RPW	Energy efficiency	Cogeneration facilities	Electrical energy produced per operating year	MWhe						1.669.146	2.028.560	1.585.195	1.292.799	1.515.332	1.882.310	1.807.728	1.792.325	1.474.560	1.474.560	1.474.560							
				Thermal energy produced per operating year	MWht						659.604	751.435	817.637	477.307	612.983	680.375	538.323	543.157	432.117	432.117	432.117							
				Primary energy saving per operating year	MWh						84.092	97.341	84.700	58.099	871.249	1.026.936	905.088	730.886	800.263	820.670	840.349							
				Avoided CO2 emissions from fossil sources per operating year	t						310.931	400.332	349.098	265.512	303.862	321.873	269.818	263.595	252.292	257.175	265.655							
11	Mini Hydro Fornace plant in Baiso (RE)	Renewable energy	Mini hydro power	Net produced electricity from renewable non-fossil sources per operating year	kWh						7.118.000	8.415.080	8.428.502	6.956.287	6.879.252	4.814.847	7.559.000	7.871.000	7.400.000	7.400.000	7.400.000							
				Avoided CO2 emissions from fossil sources per operating year	t						3.505	4.270	4.357	3.675	3.525	2.368	3.634	3.770	3.639	3.639	3.639							
12	Photovoltaic plants owned by "Varsi" company	Renewable energy	Solar PV energy generation	Net produced electricity from renewable non-fossil sources per operating year	kWh						9.140.541	9.190.145	8.441.384	8.180.693	9.462.000	8.700.000	9.150.000	8.861.162	8.861.162	8.861.162								
				Avoided CO2 emissions from fossil sources per operating year	t						4.501	4.663	4.364	4.322	4.653	4.160	4.383	4.358	4.358	4.358								
13	Photovoltaic plants owned by "Greensource" company	Renewable energy	Solar PV energy generation	Net produced electricity from renewable non-fossil sources per operating year	kWh						4.261.527	4.241.703	4.113.361	3.670.617	4.491.000	4.255.000	4.464.000	4.137.375	4.137.375	4.137.375								
				Avoided CO2 emissions from fossil sources per operating year	t						2.098	2.152	2.126	1.939	2.209	2.035	2.138	2.035	2.035	2.035								
MARKET	14	E-mobility initiatives in the Iren offices	Transport	Electric vehicles	Avoided CO2 emissions from fossil sources per operating year	t											52	789	691	871	1.063							
NETWORKS	15	Investments in Sewage and Waste water plants (Emilia and Liguria)	Waste water treatment	Waste water treatment plant upgrades	Water Treatment plants	N	1.014	1.030	1.035	1.047	1.047	1.056	1.076	1.085	1.102	1.122	1.278	1.293	1.299	1.299	1.299							
					Sewage systems	km	7.689	8.075	8.443	8.772	8.983	9.052	9.164	9.274	9.293	9.924	10.606	10.662	10.803	10.803	10.803							
	16	Electricity distribution investments	Energy efficiency	Energy distribution and management	Network leaks	%				5%	5%	7%	6%	6%	5%	4%	4%	4%	4%	4%	4%							
Network leaks					GWh				220	244	315	249	246	204	173	167	169	173	173	173								
				Electricity fed into the network	GWh				4.484	4.485	4.451	4.097	4.191	4.387	4.420	4.002	3.987	4.420	4.420	4.420								