

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	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	29.811	29.811	29.811	29811						
					Percentage of WDF on total treated waste per operating year	%														10%	5%	29%	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	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	1.835.891	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	1.098.490	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	1.355.705	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	372.763	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	633.055	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	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	19.030	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	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	1.474.560	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	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	778.874	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	241.958	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	7.400.000	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	3.639	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	8.861.162	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	4.358	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	4.137.375	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	2.035	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	489	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	1.299	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	10.803	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	173	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	4.420	4.420	4.420	4.420							