4.2 Green bonds

4.2.1 Green bond issuances

The VGP Green finance framework was introduced in 2019 as part of our strategy to diversify financing sources. The Group has decided to develop a Green Bond framework to finance new development projects, and/or standing assets which meet the environmental criteria for the construction and operational phases as defined in the "Use of Proceeds" procedure, and specified hereafter. Green Bonds are only used to finance resilient eligible assets, in line with a clear procedure for allocating funds.

VGP issued its first Green Bond on the Euro market in March 2021. In January 2022, the Group issued its second Green Bond (split into two tranches) on the Euro market. These issuances are testament to the success of the Group's integral focus on ESG as part of the organization, investments, and financing. In total, the two issuances raised €1.60 billion.

4.2.2 Green bond criteria

The ESG criteria associated with the Green Bonds were approved by S&P Global/CICERO. They are (i) aligned with the "Green Bond Principles" (GBP) updated in March 2015 and (ii) fit in with the Group's ESG strategy. Proceeds from Green Bonds issued under this framework will be used exclusively to finance and/or refinance, in whole or in part, "Eligible Assets", described in the Green Finance Framework.

Proceeds can be allocated to refinance existing projects as well as finance new developments.

Eligible projects include:

— renewable energy projects (i.e., onshore and off shore renewable energy facilities, including primarily solar and wind projects, but also hydrogen and geothermal energy projects)
— Category of green buildings (i.e., real estate assets with BREEAM "Very Good" certification or equivalent DGNB/LEED rating)
— Other eligible project categories include energy efficiency (i.e., for existing or new (logistics) buildings, warehouses and technologies-related services and products), waste management (i.e., projects, investments and expenditures which promote better recycling rates), clean transportation (i.e., electric vehicle charging stations, bike facilities), and sustainable water management (i.e., reduce freshwater consumption, capturing and recycling rainwater, green roofing)

Additional criteria and indicators to be monitored for eligible assets – including EU Taxonomy and CRREM, also referring to section 4.1 on EU Taxonomy and section 3.3.4 on CRREM respectively – are published on the Investor Relations' website under the following link: *https://www.vgpparks.eu/en/investors/financial-debt/*

4.2.3 Current allocation of green bond proceeds

In line with the Group's internal Green Bond analysis, selection and monitoring procedure, the funds generated by Green Bonds issuances are allocated to the selected assets based on a previously defined list of "eligible assets". The criteria are presented above and explained in detail in the Green Finance Framework as available on the Group website.

In the case of an asset disposal (both in full or partially) to one of the Group's Joint Ventures during the funding period (i.e. prior to the bond issue maturity), the proceeds initially allocated to the disposed asset shall be reallocated to another "eligible asset" held by the Group, based on the same process. In case of a full disposal the equivalent asset base shall be reallocated and in case of a disposal to one of the Joint Ventures the remaining equity interest shall be reflected in the pro-rata asset allocation.

The allocation of the proceeds from the outstanding Green Bonds as at 31 December 2023 is illustrated below:

	Green Bond – April 2029		Green Bond – Jan 2027		Green Bond – Jan 2030		For reference:
Use of categories	**Net bond proceeds allocation *(€)***	**% of total net bond proceeds**	**Net bond proceeds allocation *(€)***	**% of total net bond proceeds**	**Net bond proceeds allocation *(€)***	**% of total net bond proceeds**	**EIB loan allocation *(€)***
Renewable Energy	63,037,369	10.5%	—	0.0%	—	0.0%	44,809,712
Green buildings	752,829,611	125.5%	652,838,768	130.6%	861,878,614	172.4%	
o/w min excellent or gold-rated	518,497,981	86.4%	518,501,517	103.7%	500,514,527	100.1%	
Energy Efficiency	26,274,163	4.3%	—	0.0%		0.0%	
Waste Management	—	0.0%	—	0.0%	—	0.0%	
Clean Transportation	658,209	0.1%	—	0.0%	—	0.0%	
Sustainable Water Management	2,702,350	0.5%	—	0.0%	—	0.0%	
(over)/ unallocated	(245,501,701)	(40.8)%	(152,838,768)	(30.6)%	(361,878,614)	(72.4)%	90,190,288
(over)/ unallocated excl BREEAM Very Good or equivalent	**11,170,701**		**(18,501,517)**		**(514,527)**		
Total gross proceeds	**600,000,000**	**100.0%**	**500,000,000**	**100.0%**	**500,000,000**	**100.0%**	**135,000,000**

The allocation of the proceeds between CAPEX and refinancing:

Type of financing	**Grand Total *(€)***	*%*
CAPEX financing 2021	656,853,160	41%
CAPEX financing 2022	789,015,636	49%
CAPEX financing 2023	291,031,580	18%
Refinancing	622,824,228	39%
Total	**2,359,724,603**	**147%**
Over/(under) allocation	759,724,603	47%
Total gross proceeds	**1,600,000,000**	**100%**

With regards to EU Taxonomy compliance, 8% of the proportional investments are in compliance with EU Taxonomy and the Group is conducting a review of several more assets in its portfolio for alignment with EU Taxonomy. As a consequence, the aligned portion of the portfolio with EU Taxonomy is expected to grow substantially in the coming period.

Alignment with EU Taxonomy based on proportional share of investment		
	Dec.23	*%*
Use of proceeds aligned with EU Taxonomy	133,048,522	8%
Incl. proceeds under review/being certified for EU Taxonomy alignment	294,460,522	18%
Use of proceeds eligible for EU Taxonomy (alignment to be assessed)	1,305,539,478	82%
Use of proceeds not aligned with EU Taxonomy	—	
Total	**1,600,000,000**	**100%**

4.2.3.1 Green bond – April 2029

Green buildings allocation by certification type (€ – proceeds allocation)

Country	BREEAM – Outstanding	BREEAM – Excellent	DGNB – Platinum	DGNB/OGNI – Gold	Grand Total	%
Austria	—	—	—	64,565,056	64,565,056	12%
Croatia	—	—	—	—	—	0%
Czechia	—	—	—	—	—	0%
Denmark	—	—	—	—	—	0%
France	—	—	—	—		0%
Germany	—	—	—	429,589,024	429,589,024	83%
Hungary	—	—	—	—	—	0%
Italy	—	3,011,172	—	—	3,011,172	1%
Latvia	—	—	—	—	—	0%
Netherlands	—	—	—	—	—	0%
Portugal	—	—	—	—	—	0%
Romania	—	18,374,282	—	—	18,374,282	4%
Serbia	—	—	—	—	—	0%
Slovakia	—	—	—	—	—	0%
Spain	—	2,958,448	—	—	2,958,448	1%
Grand Total		**24,343,902**	**—**	**494,154,079**	**518,497,981**	
% of total[1]	0%	3%	0%	59%	836,349,774	

Renewable energy specification (€ proceeds allocation)

Country	2021	2022	2023	Total	Total (Apr '29 Bond)
Austria	—	—	—	—	—
Croatia	—	—	—	—	—
Czech Republic	—	73,038	*2,869,960*	*2,942,998*	73,038
France	—	—	—	—	—
Germany	19,072,084	30,270,609	*36,904,646*	*86,247,339*	49,342,693
Hungary	84,909		—	*84,909*	84,909
Italy	—	704,348	*3,131,513*	*3,835,861*	704,348
Latvia	—	—	—	—	—
Netherlands	5,309,425	6,644,132	*835,417*	*12,788,974*	11,953,557
Portugal	—	—	—	—	—
Romania	—	530,824	*1,068,176*	*1,599,000*	530,824
Serbia	—	—	—	—	—
Slovakia	—	—	—	—	—
Spain	—	348,000	—	*348,000*	348,000
Total	**24,466,418**	**38,570,951**	*44,809,712*	*107,847,081*	**63,037,369**

Sustainable Water Management (€ proceeds allocation)	
Czech Republic	185,354
Germany	2,341,996
Netherlands	175,000
Total	**2,702,350**

1 As % of total allocation to the bond (incl over-allocation).

4.2.3.2 Green bond – January 2027

Green buildings allocation by certification type in euros invested

Green buildings specification – € proceeds allocation per sustainable certification level by country						
Country	**BREEAM – Outstanding**	**BREEAM – Excellent**	**DGNB – Platinum**	**DGNB/OGNI – Gold**	**Grand Total**	*%*
Austria	—	—	—	—	—	0%
Croatia	—	—	—	—	—	0%
Czechia	—	—	—	—	—	0%
Denmark	—	—	—	—		0%
France	—	—	—	—	—	0%
Germany	—	—	56,414,224	413,558,655	469,972,879	91%
Hungary	—	—	—	—	—	0%
Italy	—	3,641,157	—	—	3,641,157	1%
Latvia	—	—	—	—	—	0%
Netherlands	—	—	—	—	—	0%
Portugal	—	44,887,482	—	—	44,887,482	9%
Romania	—	—	—	—	—	0%
Serbia	—	—	—	—	—	0%
Slovakia	—	—	—	—	—	0%
Spain	—	—	—	—	—	0%
Grand Total		**48,528,639**	**56,414,224**	**413,558,655**	**518,501,517**	
% of total[1]	0%	6%	7%	49%	652,838,768	

4.2.3.3 Green bond – January 2030

Green buildings allocation by certification type in euros invested

Green buildings specification – € proceeds allocation per sustainable certification level by country						
Country	**BREEAM – Outstanding**	**BREEAM – Excellent**	**DGNB – Platinum**	**DGNB/OGNI – Gold**	**Grand Total**	*%*
Austria	—	—	—	105,376,919	105,376,919	20%
Croatia	—	—	—	—	—	0%
Czechia	—	36,638,240	—	—	36,638,240	7%
Denmark	—	—	—	—		0%
France	—	—	—	—	—	0%
Germany	—	—	—	255,966,862	255,966,862	49%
Hungary	—	—	—	—	—	0%
Italy	—	—	—	—	—	0%
Latvia	—	—	—	—	—	0%
Netherlands	—	—	—	—	—	0%
Portugal	—	17,103,590	—	—	17,103,590	3%
Romania	11,834,453	34,454,989	—	—	46,289,442	9%
Serbia	—	—	—	—	—	0%
Slovakia	—	—	—	—	—	0%
Spain	—	39,139,474	—	—	39,139,474	8%
Grand Total	**11,834,453**	**127,336,293**	**—**	**361,343,782**	**500,514,527**	
% of total[2]	1%	15%	0%	43%	861,878,614	

1 As % of the total allocation to the bond (including over-allocation).
2 As % of the total allocation to the bond (including over-allocation).

4.2.4 Audited criteria

VGP engaged an independent auditor to verify that the assets financed meet the eligibility criteria. The reporting on these criteria and the independent auditor's attestation on the information related to the allocation of funds are presented in the following section.

4.2.5 Annual Reporting on green bonds in compliance with framework

4.2.5.1 Renewable energy

This category includes the financing and/or refinancing of projects, investments and expenditures in products, technologies and services ranging from the generation and transmission of energy to the manufacturing of related equipment including among others onshore and offshore renewable energy facilities. This includes among others solar, wind, hydro and geothermal energy projects.

Of the 116 photovoltaic projects on VGP Parks' roofs 104 are owned and operated by VGP and of these 87 are included in the Green Finance Framework allocation. Of these 65 systems were operational by December 2023, representing 86 MWp and a further 22 were under construction/waiting for grid connection, representing 48 MWp.

The eligible photovoltaic investments have generated green energy in 2023 for in total 44 GWh, equivalent to 19,519 tCO_2e. For calculating the equivalent CO_2 emissions, the average grid factor of the VGP Parks portfolio of 0.439 tCO_2/MWh[1] has been used:

Full year actual renewable energy production	**2021**	**2022**	**2023**
Full year production (MWh)	8,216	27,449	44,496
Emission factor (tCO_2/MWh)	0.308	0.333	0.439
Avoided emissions (tCO_2)	2,529	8,450	19,519

Anticipated annual renewable energy production	**2022**	**2023**
Full year production (MWh)	105,303	120,321
Emission factor (tCO_2/MWh)	0.333	0.439
Avoided emissions (tCO_2)	32,417	52,781

Please refer to the table below for the allocation of PV systems per bond and by status of the PV system (operational vs under construction):

	PV capacity *(KWp)*		**Production**	**Bond allocation**		
Country/Park/Building code	**existing**	**awarded**	**KWH p.a.**	**Apr-29**	**Jan-27**	**Jan-30**
Germany						
VGP Park Berlin						
GERBER – A	745		627,698	x		
VGP Park Berlin 2						
GERBER2 – B	746		628,811	x		
GERBER2 – C	750		631,930	x		
VGP Park Berlin 4						
GERBER4 – M		1,591	1,341,044	x		
VGP Park Berlin Oberkrämer						
GEROBK – A		299	243,889	x		
GEROBK – A		849	691,691	x		
GEROBK – D	639		521,078	x		
VGP Park Berlin Wustermark						
GERWUS – A1	745		683,543	x		
VGP Park Borna						
GERBOR – A	748		642,910	x		
VGP Park Buseck						
GERBUS – A	749		643,020	x		

1 For each year the average emission factor for grey electricity for the VGP portfolio has been used. For an explanation of the year-over-year change in emission factor, please refer to section 3.1.2.2 "GHG emissions from tenant operations".

	PV capacity *(KWp)*		Production	Bond allocation		
Country/Park/Building code	**existing**	**awarded**	**KWH p.a.**	**Apr-29**	**Jan-27**	**Jan-30**
VGP Park Chemnitz						
GERCHE – A	746		693,706	x		
VGP Park Erfurt						
GERERF – A	750		622,185	x		
GERERF – A		1,538	1,276,125	x		
VGP Park Erfurt 2						
GERERF2 – B		3,327	2,761,609	x		
VGP Park Erfurt 3						
GERERF3 – A		2,451	2,034,330	x		
VGP Park Gießen Am alten Flughafen						
GERGAF – A	7,770		7,070,245	x		
GERGAF – B	1,000		909,991	x		
GERGAF – B	2,399		2,183,008	x		
GERGAF – PH		869	790,972	x		
VGP Park Ginsheim						
GERGIN – A	748		672,099	x		
VGP Park Göttingen						
GERGOE – A	750		625,367	x		
GERGOE – A	747		623,031	x		
GERGOE – B			—			
VGP Park Göttingen 2			—			
GERGOE2 – C	3,870		3,227,580	x		
GERGOE2 – C	497		409,759	x		
GERGOE2 – C	2,244		1,871,496	x		
VGP Park Halle						
GERHAL – A		1,830	1,661,858	x		
GERHAL – B		2,303	2,090,724	x		
GERHAL – C		3,365	3,055,674	x		
VGP Park Halle 2						
GERHAL2 – A		1,328	1,205,824	x		
GERHAL2 – B						
VGP Park Hamburg						
GERHAM – A1	750		586,952	x		
GERHAM – A2	750		586,952	x		
GERHAM – A3			—			
VGP Park Hamburg 2						
GERHAM2 – B1	2,544		1,991,670	x		
GERHAM2 – B2	750		586,952	x		
GERHAM2 – B3			—			
VGP Park Hamburg 3						
GERHAM3 – C	750		586,952	x		
VGP Park Hochheim						
GERHOH – A		1,115	1,014,832	x		
VGP Park Höchstadt						
GERHOE – A	748		662,560	x		
VGP Park Koblenz						
GERKOB – A		3,174	2,815,338	x		
VGP Park Laatzen						
GERLAA – A		3,624	2,917,642	x		
GERLAA – B						
GERLAA – C	3,567		2,871,435	x		

	PV capacity *(KWp)*		Production	Bond allocation		
Country/Park/Building code	**existing**	**awarded**	**KWH p.a.**	**Apr-29**	**Jan-27**	**Jan-30**
GERLAA – PH Ost		375	301,875	x		
VGP Park Leipzig Flughafen						
GERLFH – A	299		272,064	x		
GERLFH – A	899		817,282	x		
VGP Park Leipzig Flughafen 2						
GERLFH2 – B		2,349	2,135,241	x		
VGP Park Lützellinden						
GERLUE – A	748		654,080	x		
VGP Park Magdeburg						
GERMAG – A	750		643,174	x		
GERMAG – A	1,798		1,542,856	x		
GERMAG – B	2,244		1,925,077	x		
GERMAG – C		10,273	8,814,200	x		
GERMAG – F	4,095		3,513,510	x		
VGP Park München						
GERMUE – A	748		740,207	x		
GERMUE – A	1,696		1,677,423	x		
GERMUE – B	3,791		3,749,101	x		
GERMUE – C	3,003		2,970,442	x		
GERMUE – E	1,895		1,874,551	x		
GERMUE – F	97		96,131	x		
GERMUE – PH Nord		460	454,940	x		
GERMUE – PH Sud	316		312,425	x		
VGP Park Rodgau						
GERROD – C	746		707,132	x		
VGP Park Rostock						
GERROS – A		2,193	1,890,366	x		
VGP Park Schwalbach						
GERSCH – A	645		569,049	x		
VGP Park Soltau						
GERSOL – A	749		593,798	x		
GERSOL – A	2,399		1,902,407	x		
VGP Park Wetzlar						
GERWET – B	747		644,696	x		
Italy						
VGP Park Calcio						
ITACAL – A	16		18,320			
ITACAL – A		3,176	3,636,806	x		
VGP Park Sordio						
ITASOR – A	25		28,400			
ITASOR – A		940	1,068,033	x		
VGP Park Valsamoggia						
ITAVAL – B		992	1,278,688	x		
Netherlands						
VGP Park Nijmegen						
NLDNIJ – A	2,279		2,096,993	x		
NLDNIJ – A	1,518		1,396,762	x		
NLDNIJ – A	1,012		930,764	x		
NLDNIJ – E						
VGP Park Nijmegen 2						
NLDNIJ2 – B1B2	869		799,020	x		

	PV capacity *(KWp)*		Production	Bond allocation		
Country/Park/Building code	**existing**	**awarded**	**KWH p.a.**	**Apr-29**	**Jan-27**	**Jan-30**
NLDNIJ2 – B1B2	2,213		2,036,328	x		
NLDNIJ2 – B3B4	5,940		5,464,800	x		
NLDNIJ2 – C	3,779		3,476,680	x		
VGP Park Roosendaal						
NLDROO – A	3,899		3,579,392	x		
Spain						
VGP Park Fuenlabrada						
ESPFUE – A	100		134,300	x		
VGP Park Lliçà d'Amunt						
ESPLLI – A	46		57,927	x		
ESPLLI – C	78		98,580	x		
ESPLLI – D	83		105,780	x		
VGP Park San Fernando de Henares						
ESPSFH – A	53		69,405	x		
ESPSFH – B1	63		82,625	x		
ESPSFH – C1	36		47,116	x		
ESPSFH – D1	20		26,440	x		
ESPSFH – E	18		23,796	x		
VGP Park Valencia Cheste						
ESPVAL – A	33			x		
ESPVAL – B	66			x		
Grand Total	86,309	48,422	120,321,463		0	0

Please refer to section 3.3.3 Energy Management and specifically 3.3.3.1 Production of Renewable Energy for further information on the Group's initiatives and KPIs with respect to renewable energy production.

4.2.5.2 Green buildings

Definition of the framework
The framework defines eligible the financing and/or refinancing of projects, investments and expenditures in relation to real estate assets which have received, or are designed and intended to receive, BREEAM "Very Good" certification (or equivalent DGNB Silver/LEED Silver rating).

In total 136 eligible building projects have been identified and allocated under the Green Financing framework. This Green building portfolio has predominantly been built since 2021 or is currently under construction. Given this is such a new portfolio it benefits from the latest ESG features of our building standard and green energy sourcing.

As a reflection of the year-over-year improvement of the quality of the portfolio, the building allocation has been upgraded to cover the required amount through buildings with a green building certification of BREEAM Excellent or DGNB Gold or better.

CRREM and 1.5°C pathway

The Group has analysed various asset specific and portfolio-based solutions to improve the stranding date. Based on the retrofit plans, heat pump initiatives, photovoltaic roll-out and green electricity transition an upgrade to 1.5°C pathway compliance until 2050 is envisaged. Further details are included in section 3.3.4.1 CRREM retrofit and improvement actions.

Upgrade to minimum BREEAM Excellent or DGNB Gold allocation

The 136 eligible building projects have been identified and allocated to the three outstanding green bonds which is shown in the table below. The table also shows the certification level as well as status of the certification process. The BREEAM Excellent or DGNB Gold rated buildings have been taken as a minimum to allocate the bonds in full.

Due to employed certification pre-checks and uniform VGP building standard being employed for all construction projects across Europe a very high degree of confidence can be expressed for expected realisation of the targeted certification level in case this is not yet completed. In case a project would not achieve the required certification level it will be removed from the eligible green buildings investments portfolio.

EPC

Of the completed building portfolio which is part of the net proceeds allocation of the green bonds and which has obtained an EPC rating as of 31 December 2023, 76% has received an energy EPC B score or better[1]. In light of EU Taxonomy reviews existing EPC scores continue to be reviewed and updated (as the initial ECP rating from the development phase not always reflects all retrofits or investments in eco-efficiency conducted since).

1 Given no EPC letter score is available in Germany the (conservative) residential equivalent score has been used with end-use energy below 50 KWh/m²/annum EPC A – *https://eurodw.eu/the-babel-tower-of-energy-performance-certificate-ratings-and-databases-in-europe/*

Building		Certification		Allocation		
Code	**GLA *(m²)***	**Level**	**Status**	**Green Bond – April 2029**	**Green Bond – Jan 2027**	**Green Bond – Jan 2030**
AUTEHR – A	39,813	ÖGNI – Gold	Ongoing			
AUTEHR – B	33,146	ÖGNI – Gold	Ongoing			x
AUTEHR – C	7,585	ÖGNI – Gold	Ongoing	x		
AUTGRA – A	16,537	BREEAM – Very Good	Ongoing			x
AUTGRA2 – B	8,212	ÖGNI – Gold	Realized	x		
AUTGRA2 – C	14,348	ÖGNI – Gold	Ongoing	x		
AUTLAX – A	26,076	ÖGNI – Gold	Ongoing			x
AUTLAX – B	23,372	ÖGNI – Gold	Ongoing			x
CZECEB – A	5,917	BREEAM – Excellent	Ongoing			x
CZECEB – B	8,749	BREEAM – Excellent	Ongoing			x
CZECEB – C	9,424	BREEAM – Very Good	Realized		x	
CZECEB – D	14,004	BREEAM – Excellent	Ongoing			x
CZECEB – E	48,313	BREEAM – Excellent	Ongoing			x
CZEHNN – H1	40,361	LEED – Silver	Realized			x
CZEHNN2 – H6	30,215	BREEAM – Very Good	Realized		x	
CZEKLA – A	15,806	BREEAM – Very Good	Realized			x
CZEKLA – B	11,193	BREEAM – Very Good	Realized	x		
CZEOLO3 – M	8,665	BREEAM – Excellent	Ongoing			x
CZEOLO4 – E	4,269	BREEAM – Excellent	Ongoing			x
CZEOLO5 – F	65,889	BREEAM – Very Good	Realized		x	
CZEPIL – E	5,790	BREEAM – Very Good	Realized		x	
CZEPRO – A	15,330	BREEAM – Very Good	Realized		x	
CZEPRO – B	25,055	BREEAM – Very Good	Realized		x	
CZEPRO – C	10,351	BREEAM – Excellent	Ongoing			x
CZEUST2 – A	22,813	BREEAM – Very Good	Ongoing			x
CZEUST2 – B	29,309	BREEAM – Very Good	Ongoing			x
CZEVYS – A	28,868	BREEAM – Very Good	Realized		x	
ESPCOR – A	15,419	BREEAM – Excellent	Ongoing			x
ESPCOR – B	7,218	BREEAM – Excellent	Ongoing			x
ESPDOH – B	29,091	BREEAM – Very Good	Realized			x
ESPFUE – A	41,752	BREEAM – Very Good	Realized			x
ESPGRA – A	8,920	BREEAM – Very Good	Realized		x	
ESPLLI – A	13,639	BREEAM – Very Good	Realized		x	
ESPLLI – D	7,205	BREEAM – Very Good	Realized			x
ESPLLI – E	22,195	BREEAM – Very Good	Realized	x		
ESPMAR – A	10,102	BREEAM – Excellent	Ongoing			x
ESPSEV – A	15,057	BREEAM – Excellent	Ongoing			x
ESPSEV – B	13,530	BREEAM – Excellent	Ongoing	x		
ESPSFH – C1	7,947	BREEAM – Very Good	Realized			x
ESPSFH – C2	5,165	BREEAM – Very Good	Realized	x		
ESPSFH – D1	11,453	BREEAM – Very Good	Realized			x
ESPSFH – D2	27,579	BREEAM – Excellent	Realized			x
ESPVAL – A	14,177	BREEAM – Very Good	Realized			x
ESPVAL – B	25,409	BREEAM – Very Good	Realized			x
ESPVAL – C	25,517	BREEAM – Excellent	Ongoing			x
ESPZAR – A	18,074	BREEAM – Very Good	Realized			x
ESPZAR – B	21,373	BREEAM – Very Good	Realized		x	
ESPZAR – C1	22,556	BREEAM – Very Good	Realized			x
ESPZAR – C2	13,616	BREEAM – Very Good	Realized			x
ESPZAR – D	19,146	BREEAM – Excellent	Ongoing			x
GERBER4 – M	17,337	DGNB – Gold	Realized		x	

Building		Certification		Allocation		
Code	**GLA *(m²)***	**Level**	**Status**	**Green Bond – April 2029**	**Green Bond – Jan 2027**	**Green Bond – Jan 2030**
GERERF – A	26,214	DGNB – Gold	Ongoing			x
GERERF2 – B	41,815	DGNB – Gold	Ongoing			x
GERERF3 – A	29,183	DGNB – Gold	Ongoing			x
GERFRA – A	146,898	BREEAM – Very Good	Realized			x
GERGAF – A1	124,922	DGNB – Gold	Ongoing		x	
GERGAF – A2	28,352	DGNB – Gold	Ongoing		x	
GERGAF – B	59,150	DGNB – Gold	Ongoing			x
GERGOE2 – C	80,157	DGNB – Gold	Realized		x	
GERHAL – B	26,848	DGNB – Gold	Realized		x	
GERHAL – C	37,933	DGNB – Gold	Realized		x	
GERHAL2 – A	14,862	DGNB – Gold	Ongoing		x	
GERHDW – A	20,465	DGNB – Gold	Ongoing		x	
GERHDW – B	29,139	DGNB – Gold	Ongoing	x		
GERHDW – C	25,850	DGNB – Gold	Ongoing			x
GERHDW2 – A	43,471	DGNB – Gold	Initiation	x		
GERHOH – A	12,025	DGNB – Gold	Ongoing		x	
GERKOB – A	32,377	DGNB – Gold	Ongoing	x		
GERLAA – A	55,398	DGNB – Platinum	Realized		x	
GERLAA – B	11,803	DGNB – Platinum	Realized		x	
GERLAA – C	51,262	DGNB – Gold	Realized			x
GERLAA – D	8,519	DGNB – Gold	Realized			x
GERLEI – C1	2,519	DGNB – Gold	Realized		x	
GERLEI – C2	2,379	DGNB – Gold	Realized			x
GERLFH – A	16,298	DGNB – Gold	Ongoing		x	
GERLUE – A	14,156	DGNB – Gold	Realized	x		
GERMAG – A	31,869	DGNB – Gold	Realized	x		
GERMAG – B	42,368	DGNB – Gold	Ongoing	x		
GERMAG – C1	67,376	DGNB – Gold	Ongoing	x		
GERMAG – D	74,045	DGNB – Gold	Ongoing	x		
GERMAG – F	51,995	DGNB – Gold	Ongoing	x		
GERMUE – A	56,874	DGNB – Gold	Realized	x		
GERMUE – B	81,549	DGNB – Gold	Ongoing	x		
GERMUE – C	48,471	DGNB – Gold	Ongoing		x	
GERMUE – E	39,352	DGNB – Gold	Ongoing			x
GERMUE – F	7,487	DGNB – Gold	Ongoing	x		
GEROBK – A	13,717	DGNB – Gold	Realized	x		
GEROBK – B	11,502	DGNB – Gold	Realized	x		
GEROBK – C	9,086	DGNB – Gold	Ongoing	x		
GEROBK – D	24,223	DGNB – Gold	Realized		x	
GERROS – A	20,447	DGNB – Gold	Ongoing			x
GERSOL – A	55,813	DGNB – Gold	Realized	x		
GERWUS – A1	10,997	DGNB – Gold	Realized	x		
HRVLUC – A	36,867	BREEAM – Very Good	Ongoing		x	
HUNBUD – A	29,853	BREEAM – Very Good	Ongoing			x
HUNBUD – B.1	11,015	BREEAM – Very Good	Realized	x		
HUNBUD – C1.1	13,544	BREEAM – Very Good	Ongoing		x	
HUNGYO2 – A	37,998	BREEAM – Very Good	Ongoing			x
HUNGYO2 – B	13,915	BREEAM – Very Good	Ongoing	x		
HUNKEC – A	21,937	BREEAM – Very Good	Ongoing	x		
HUNKEC – C	20,149	BREEAM – Very Good	Ongoing			x
ITACAL – A	23,303	BREEAM – Very Good	Realized	x		

Building		Certification		Allocation		
Code	GLA *(m²)*	Level	Status	Green Bond – April 2029	Green Bond – Jan 2027	Green Bond – Jan 2030
ITAPAD – A	15,301	BREEAM – Very Good	Realized	x		
ITAPAD – B	7,246	BREEAM – Very Good	Realized	x		
ITAPAR2 – A	5,710	BREEAM – Excellent	Realized		x	
ITASOR – A	12,035	BREEAM – Very Good	Realized			x
ITAVAL – A	6,679	BREEAM – Excellent	Realized	x		
ITAVAL – B	16,106	BREEAM – Very Good	Realized	x		
LVARIG – A1	7,030	BREEAM – Very Good	Ongoing			x
LVATIR – A	28,897	BREEAM – Very Good	Realized	x		
NLDNIJ – A	67,352	BREEAM – Very Good	Realized			x
NLDNIJ2 – B1B2	42,505	BREEAM – Very Good	Ongoing			x
NLDNIJ2 – B3B4	62,520	BREEAM – Very Good	Ongoing			x
NLDNIJ2 – C	35,052	BREEAM – Very Good	Ongoing			x
NLDROO – A	41,960	BREEAM – Very Good	Realized			x
NLDROO – B	9,294	BREEAM – Very Good	Realized			x
PRTLOU – A	12,606	BREEAM – Excellent	Ongoing			x
PRTLOU – B	7,143	BREEAM – Excellent	Ongoing		x	
PRTMON – A	31,789	BREEAM – Excellent	Ongoing		x	
PRTSIN – A	12,901	BREEAM – Excellent	Ongoing		x	
PRTSMF – A	29,813	BREEAM – Very Good	Realized		x	
ROMARA – A	29,414	BREEAM – Very Good	Realized	x		
ROMARA – B	40,081	BREEAM – Excellent	Ongoing			x
ROMBRA – A	28,956	BREEAM – Very Good	Realized	x		
ROMBRA – B1	20,920	BREEAM – Excellent	Ongoing			x
ROMBRA – B2	13,812	BREEAM – Excellent	Ongoing			x
ROMBRA – E	9,556	BREEAM – Very Good	Realized	x		
ROMBRA – I	17,465	BREEAM – Excellent	Realized			x
ROMBUC – C	30,507	BREEAM – Very Good	Realized	x		
ROMBUC – D	15,699	206 – BREEAM – Outstanding	Realized			x
ROMTIM2 – D	30,775	BREEAM – Very Good	Realized		x	
ROMTIM3 – E	32,768	BREEAM – Excellent	Ongoing	x		
SVKBRA – F	57,328	BREEAM – Very Good	Realized	x		
SVKBRA – G	19,201	BREEAM – Very Good	Ongoing	x		
SVKBRA – H	18,354	BREEAM – Very Good	Realized	x		

Please refer to section 3.2 Sustainable Properties and more specifically 3.2.2 Environmental certifications for additional details on the Group's certification initiatives.

4.2.5.3 Energy efficiency

The financing and/or refinancing of projects, investments and expenditures focusing on Energy Efficiency measures in existing or new (logistics) buildings, warehouses and technologies (insulation, LED relighting, motion detectors, energy monitoring tools etc.) and related services and products.

Whilst not all eco-efficiency measures have been separately accounted for the measures identified include air heat pumps, energy saving LED investments, sun protection and moving sensors in offices to reduce energy consumption. These expenditures and refurbishments in 102 buildings have resulted in ca. €41 million of additional eligible investments, the proportional eligible spent amounts to €26 million.

Properly sized heat pump installations instead of gas-powered heating help reduce the gas consumption of our buildings. Furthermore, such HVAC installations allow more easily to heat of cool different areas of the warehouse separately depending on occupancy and use. Automated controls further help optimize the operation of HVAC systems based on occupancy schedules and temperature settings in offices.

Energy efficiency measures	
Avoided energy consumption and emissions	**2023**
Avoided energy consumption (MWh)	35,317
Emission factor (tCO_2/MWh)	0.058
Avoided emissions (tCO_2)	2,054

The emission factor is weighted emission factor based on the effective net kWh savings in electricity and gas against portfolio average emission factors of electricity (0.439 tCO_2/MWh) and gas (0.1850 tCO_2/MWh). For heat pumps an annualized Coefficient of Performance (CoP) of 3.0 is assumed. Details on the energy efficiency measures and related KPIs are discussed in more detail in section 3.3 Improving eco-efficiency.

4.2.5.4 Waste management

The financing and/or refinancing of projects, investments and expenditures which promote better recycling rates. The Group did not isolate any investments made specifically related to waste management. Please refer to section 3.3.6 Waste Management for further information on the Group's waste management user data and KPIs and waste management improvement initiatives.

4.2.5.5 Clean transportation

The financing and/or refinancing of projects, investments and expenditures which promote clean transportation (electric vehicle charging stations, bike facilities, etc.). The Group has set the target to developing connectivity and sustainable mobility for each VGP Park to be equipped with EV charging and public transport access.

The reported investments in electric charging facilities in the VGP Parks in 2023 amounts to € 1.0 million in 50 VGP Parks locations, reflecting the locations where EV chargers have been installed and cost base could be isolated. The proportional eligible spent amounts to €0.65 million. Based on the limited sites for which charging data is available the total kWh charged at the sites is 300,000 kWh per annum.

EV charging infrastructure	
Avoided emissions	**2023**
Total EV charging *(MWh)*	299
Assumed car KMs covered[1]	1,573,000
Avoided emissions *($kgCO_2$/km)*[2]	0.050
Avoided emissions *(tCO_2)*	**79**
please note this data is based on a gross-up of sites for which charging data is available	

Developing connectivity and sustainable mobility within VGP Parks is one of the key ESG targets of the Group. Further details can be found in section 3.3.7 Develop connectivity and sustainable mobility.

1 Based on assumed 0.19 kwh/km average reach of new European BEVs (€46,000 new price). Source: *https://alternative-fuels-observatory.ec.europa.eu/general-information/vehicle-types*.

2 Based on the emission factor for diesel vehicles (0.15 $kgCO_2$/KM) minus the emission factor for grey electricity (0.08 $kgCO_2$/KM) for charging EV vehicles (weighted according to car use in VGP countries).

4.2.5.6 Sustainable Water Management

The financing and/or refinancing of projects, investments and expenditures which promote a sustainable water management (reduce freshwater consumption, capturing and recycling rain water, green roofing etc.).
Selected eligible projects:

Sustainable Water Management

Park	Project	Green Bond – April 2029	Green Bond – Jan 2027	Green Bond – Jan 2030
VGP Park Munchen	Infiltration basin south incl. plants / vegetation	x		
VGP Park Gottingen	Rainwater channels with rainwater retention basin	x		
VGP Park Buseck	Use of rainwater for toilet facilities (cistern, piping, separation systems, technology) and Infiltration of rainwater in the rainwater retention basin	x		
VGP Park Magdeburg	Rainwater channels with large rainwater retention basin combined and connected (through transport trenches) with several smaller basins with overflow and throttling system	x		
VGP Park Roosendaal	Infiltration crates, installation built under building for water overflow and retention (independent of public sewerage)	x		
VGP Park Berlin	Entire green roof for water retention and bio-diversity stimulation	x		
VGP Park Kladno	Rainwater channels with rainwater retention basin	x		
VGP Park České Budějovice	Rainwater channels with rainwater retention basin	x		

In 2023, the water management projects collected 180,800 m³ of rainwater/greywater on site, which were partially used for cleaning and for watering green spaces.

Please refer to section 3.3.5 Water Management for further information on the Group's water management user data and KPIs and water management improvement initiatives.

4.2.6 Independent third party's report on green bond criteria and indicators

VGP has commissioned Cicero Shades of Green, part of S&P Global, as a third-party reviewer to check the allocation against the Green Finance Framework criteria and impact metrics for relevance and transparency. The attestation on the information related to the allocation of funds from Cicero Shades of Green is available hereafter. The original document is also available on VGP's website.

Community Day Czech Republic 2023

4.3 VGP External Review of Green Finance Reporting 2023

March 7, 2024

This report was produced by S&P using Shades of Green Methodology.
On December 1, 2022, S&P Global acquired Shades of Green from CICERO.

S&P Global has reviewed the elements of VGP's Corporate Responsibility Report 2023 ("Report") relating to its green financing activities. We review against VGP's Green Finance Framework (dated March 2021, the "Framework") criteria, and impact metrics for relevance and transparency.

We consider that the allocations in the Report align with the Framework. Note that, according to the Report, around 96% of assets in VGP's green portfolio are green buildings. The green buildings project category received a Light Green in our Second Party Opinion. Based on the Shades of Green allocated to the project categories, the investments in VGP's green portfolio are not therefore, on the whole, representative of the Medium Green shading awarded to the Framework in our Second Party Opinion. Nonetheless, we note that – generally speaking – VGP demonstrates a more holistic approach to the climactic and environmental performance of the green buildings portfolio. For example, according to VGP, the green buildings produce more renewable energy than energy consumed, while the green portfolio includes around EUR 1.5 billion of green buildings with BREEAM Excellent or DGNB Gold (or better) certifications, exceeding the minimum Framework requirements.

We consider that the Report utilizes relevant and sufficiently transparent impact metrics. In an improvement on last year's Report, VGP now includes impacts for all project categories to which proceeds have been allocated.

Finally, we consider the Report aligns with the core principles and recommendations contained in ICMA's Handbook – Harmonized Framework for Impact Reporting (June 2023). [1]

1 ICMA Handbook

Project allocation

VGP has issued two green bonds under the Framework, totaling EUR 1.6 billion. The first, issued in March 2021, raised EUR 600 million, and the second, issued in January 2022, raised EUR 1 billion in two, EUR 500 million tranches. Allocation is reported as at December 31, 2023 with eligible assets in VGP's green portfolio totaling around EUR 2.4 billion.

In respect of allocation, we consider the Report aligned with the Framework; for a more detailed review, please see Appendix 1.

The Framework was assigned an overall Medium Green in our Second Party Opinion, reflecting that, during the Second Party Opinion process, VGP noted that the main share of proceeds would be used for renewable energy projects and that proceeds would be used in a "balanced" way.[1] Project categories were shaded Dark Green (renewable energy, waste management, clean transportation, and sustainable water and wastewater management projects), Light to Medium Green (energy efficiency), and Light Green (green buildings). Figure 1 sets out the allocations by Shade of Green, showing that around 96% of assets in VGP's green portfolio are green buildings. Based on the Shades of Green allocated to the project categories, the investments in VGP's green portfolio are not therefore – on the whole – representative of the Medium Green shading awarded to the Framework.

Nonetheless, we note that, generally speaking, VGP demonstrates a more holistic approach to the climactic and environmental performance of its green buildings portfolio. For example: i) the green portfolio includes around EUR 1.5 billion of green buildings with BREEAM Excellent or DGNB Gold (or better) certifications, exceeding the minimum Framework requirements,[2] ii) according to VGP, the green buildings produce more renewable energy than energy consumed, iii) investments made in energy efficiency, including under the Framework, for example the use of heat pumps as standard (where feasible), and iv) VGP expects a substantial growth in these assets that align with the EU Taxonomy as a result of ongoing alignment reviews.

Allocation by Shade of Green

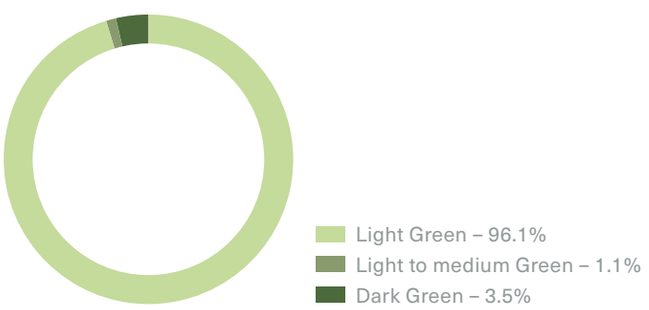

Figure 1: Allocation by SPO Shade of Green. Shading is based on evaluation at time of issuance and does not reflect ex-post project verification.

Impact metrics

VGP reports impacts as at December 31, 2023. We consider that VGP provides transparent and relevant impact reporting for all project categories to which proceeds have been allocated; for a more detailed review, please see Appendix 1.

For renewable energy investments, VGP reports impacts for its 116 photovoltaic projects. More specifically, it reports the capacity, full year production, and avoided emissions. For avoided emissions, VGP is transparent on the grid factor used, namely the average grid factor of the 14 European countries in which it operates. No impacts are reported for its one geothermal investment – this is considered only a minor omission.

For green buildings, VGP lists the environmental certification for each financed building. While reporting on

environmental certifications is a fair way to report impacts of green building investments, they are best reported

alongside other metrics such as energy performance. As such, it represents a fair improvement that the Report includes the percentage of (completed) green buildings within the green building portfolio that have an EPC B or better.

In a further improvement on last year's Report, VGP now includes impacts for the energy efficiency and clean transportation project categories. For energy efficiency investments, VGP reports avoided energy consumption and avoided emissions derived from the projects, while for clean transportation, it provides data on total EV charging, avoided emissions, and assumed kilometers covered by car. For sustainable water management, the report provides information on collected and reused rainwater/greywater on site.

Terms

S&P Global provides a review of VGP's annual reporting based on documentation provided by the issuer and information gathered during teleconferences and e-mail correspondence with VGP. VGP is solely responsible for providing accurate information. All financial aspects of the sustainable finance reporting – including the financial performance of the bond and the value of any investments in the bond – are outside of our scope, as are general governance issues such as corruption and misuse of funds. S&P Global does not validate nor certify the existence of investments and does not validate nor certify the climate effects of investments. Our objective has been to provide an assessment of the extent to which the bond has met the allocation and reporting criteria established in the Framework. The review is intended to inform VGP, investors and other interested stakeholders in VGP's green bond and has been made based on the information provided to us. S&P Global cannot be held liable if estimates, findings, opinions or conclusions are incorrect. Our review does not follow verification or assurance standards and we can therefore not provide assurance that the information presented does not contain material discrepancies.

1 VGP SPO
2 Around 69% of green buildings under the first bond, 79% of the first tranche of the second bond, and 58% of the second tranche of the second bond are (or expect to be) rated BREEAM Excellent or DGNB Gold.

Appendix 1 – Detailed Review

Category	Description	Review against framework criteria	
• Renewable Energy	• Projects, investments and expenditures in products, technologies and services ranging from the generation and transmission of energy to the manufacturing of related equipment including among others onshore and offshore renewable energy facilities. This includes among others solar, wind, hydro, and geothermal energy projects.	• **No discrepancies identified** • The projects financed under the renewable energy project category are solar panels and one geothermal heating project.	
• Green Buildings	• Projects, investments, and expenditures in relation to real estate assets which have received, or are designed and intended to receive, BREEAM "Very Good" certification (or equivalent DGNB/LEED rating).	• **No discrepancies identified** • VGP selected DGNB Silver and LEED Silver as equivalent to BREEAM Very Good. Investors should note there is no consensus about the equivalence of different certification schemes. • In any case, the Report states that 69% of green buildings under the first bond, 79% of the first tranche of the second bond, and 58% of the second tranche of the second bond are (or expect to be) rated BREEAM Excellent or DGNB Gold. We welcome that the majority of VGP's green building investments exceed the Framework criteria.	
• Energy Efficiency	• Projects, investments and expenditures focusing on energy efficiency measures in existing or new (logistics) buildings, warehouses. • Technologies (insulation, LED relighting, motion detectors, energy monitoring tools etc.) and related services and products, including installation.	• **No discrepancies identified** • According to the Report, investments under the energy efficiency category are LED investments, sun protection, and moving sensors to reduce energy consumption. VGP has also invested in heat pumps which replace gas heating.	
• Clean Transportation	• Electric vehicle charging stations. • Bike facilities.	• **No discrepancies identified** • According to the Report, investments under the clean transportation category are electric vehicle charging facilities across 36 locations.	
• Sustainable • water and wastewater management	• Reduction of freshwater consumption. • Capturing and recycling rainwater. • Green roofing.	• **No discrepancies identified** • The Report mentions different projects financed in this project category, such as the construction of rainwater channels with rainwater retention basin, the utilization of rainwater for toilet facilities, and the development of green roofs for water retention.	

	Impact Metrics	Relevance of metrics	Transparency considerations
	• Total energy generated (MWh). • Avoided CO_2 emissions (tCO_2e).	• Metrics are relevant and production, capacity, and avoided emissions are listed as core indicators in the ICMA Handbook – Harmonized Framework for Impact Reporting.	• Production and avoided emissions are reported on a portfolio basis, while capacity is reported on a project basis. • For avoided emissions, VGP uses the average grid factor of the 14 European countries in which it operates. Transparency on this is welcome. • No quantitative impacts are provided for the geothermal heating project.
	• Environmental certification achieved or expected to be achieved. • Percentage of (completed) green buildings in the green building portfolio with EPC B or better.	• Certification standard (including environmental certifications such as BREEAM, as well as EPCs) is listed as a core indicator in the ICMA Handbook – Harmonized Framework for Impact Reporting.	• VGP reports environmental certification on a project basis. • Given that environmental certifications do not guarantee, for example, a certain energy use, VGP could consider reporting on additional metrics such as energy use on an absolute and intensity basis. As such, we welcome that the Report includes the percentage of green buildings in the green buildings portfolio with EPC B or better. Going forward, VGP could consider including more contextual information to add colour to this metric, for example how it compares to local regulations. We expect this may occur in parallel with increased reporting on the EU Taxonomy alignment of the green building portfolio.
	• Avoided energy consumption (MWh) • Avoided emissions (tCO_2)	• Metrics are relevant and energy savings and avoided emissions are listed as core indicators in the ICMA Handbook – Harmonized Framework for Impact Reporting.	• This is the first year that VGP reports on impacts from energy efficiency projects. • VGP provides information on the baselines used for calculating avoided energy consumption, and how it derives its emissions factors for calculating avoided emissions. • According to VGP, the calculation includes a majority, rather than all, of energy efficiency investments.
	• Total EV charging (KWh) • Assumed car kilometres covered • Avoided emissions per km ($kgCO_2km$) • Avoided emissions (tCO_2)	• Metrics are relevant and/ or are included in the ICMA Handbook – Harmonized Framework for Impact Reporting as either core or "other sustainability indicators".	• This is the first year that VGP reports on impacts from clean transportation projects. • While the Report includes general information about the number of VGP sites with electric vehicle charging, some more precise information about the number and type of investments under the Framework could be helpful. • VGP provides sufficient and transparent information on how it has calculated impacts. According to the Report, the calculation is limited to sites where charging data is available.
	• Collected and reused rainwater/greywater (m^3)	• Water reuse is listed as a core indicator in the ICMA Handbook – Harmonized Framework for Impact Reporting.	• VGP reports on completed projects for this project category. Impacts for projects currently under construction will be reported following completion.