

Operator GHG Emissions

The following table presents scope 1 and 2 GHG emissions performance data for a majority of our revenue-generating mineral properties, as available from Skarn Associates for calendar years 2018 through 2024. The table also provides the emissions estimates that can be attributed to our streams and royalties and the average emission intensity for our portfolio. We have estimates of GHG emissions associated with about 99% of our net GEOs in each of the six years presented. The process to calculate the GHG emission footprint for our portfolio is described in detail on page 136. Entries labeled “NR” means the data was not reported in the Skarn Associates database, and those labeled “–” are for periods when Royal Gold did not have royalty or stream revenue from the mineral property. Skarn Associates may update prior year information. We use the most current data available from Skarn Associates and adjust our presentation of data and calculations accordingly. The Operator GHG Emissions table does not include assets from the Sandstorm/Horizon or Kansanshi transactions as these were not in our portfolio during 2024.

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Principal Properties												
Andacollo	2019	17.2%	35,000	181,966	216,965	0.15	0.78	0.93		6,918	35,968	42,887
Teck Resources Limited	2020	13.4%	39,680	133,247	172,927	0.16	0.54	0.70		5,749	19,305	25,053
	2021	11.4%	42,616	0.00	42,616	0.22	0.00	0.22		7,273	0.00	7,273
	2022	8.4%	41,650	0.00	41,650	0.26	0.00	0.26		5,707	0.00	5,707
	2023	8.4%	42,405	0.00	42,405	0.27	0.00	0.27		5,790	0.00	5,790
	2024	6.5%	39,000	0.00001	39,000	0.25	0.00	0.25	1st	4,232	0.0	4,232
Cortez ³	2019	4.3%	274,152	123,849	398,001	0.28	0.13	0.41		3,289	1,486	4,774
Nevada Gold Mines LLC	2020	6.1%	292,832	108,216	401,047	0.37	0.14	0.50		5,998	2,217	8,215
	2021	11.0%	297,000	56,000	353,000	0.41	0.08	0.48		12,663	2,388	15,050
	2022	10.6%	284,000	42,000	326,000	0.33	0.05	0.38		9,182	1,358	10,540
	2023	18.8%	289,000	30,000	319,000	0.32	0.03	0.36		15,761	1,636	17,397
	2024	11.3%	299,000	27,250	326,250	0.41	0.04	0.45	2nd	12,114	1,104	13,217
Mount Milligan	2019	23.3%	65,741	16,018	81,759	0.21	0.05	0.26		13,148	3,204	16,351
Centerra Gold Inc.	2020	24.8%	66,580	23,867	90,447	0.21	0.08	0.29		14,265	5,114	19,379
	2021	23.5%	69,406	5,848	75,254	0.21	0.02	0.23		14,168	1,194	15,361
	2022	27.0%	78,652	6,714	85,366	0.25	0.02	0.27		17,695	1,511	19,205
	2023	23.5%	72,493	7,075	79,568	0.27	0.03	0.30		16,664	1,626	18,290
	2024	24.3%	77,335	6,988	84,323	0.29	0.03	0.32	1st	18,583	1,679	20,262

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Pueblo Viejo Barrick Gold Corporation	2019	17.3%	2,165,898	0	2,165,898	2.07	0	2.07		95,994	0	95,994
	2020	16.9%	1,860,150	57,914	1,918,064	1.94	0.06	2.00		87,648	2,729	90,377
	2021	14.1%	2,129,000	85,000	2,214,000	2.46	0.10	2.56		98,819	3,945	102,764
	2022	12.4%	1,847,000	73,000	1,920,000	2.41	0.10	2.50		79,228	3,131	82,359
	2023	10.6%	1,787,000	87,000	1,874,000	3.00	0.15	3.15		82,710	4,027	86,737
	2024	9.6%	1,916,000	151,779	2,067,779	3	0.24	3	4th	76,014	6,022	82,035
Non-Principal Properties												
Allan/Borax Nutrien Ltd.	2019	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2020	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.3%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bald Mountain ³ Kinross Gold Corporation	2019	0.2%	115,195	30,245	145,440	0.61	0.16	0.77		361	95	456
	2020	0.0%	127,155	33,951	161,106	0.66	0.18	0.84		55	15	70
	2021	0.2%	127,142	26,931	154,073	0.62	0.13	0.75		305	65	369
	2022	0.4%	117,108	17,277	134,385	0.55	0.08	0.63		555	82	636
	2023	0.3%	110,964	17,577	128,541	0.70	0.11	0.82		615	97	712
	2024	0.1%	112,509	56,299	168,808	0.62	0.31	0.93	3rd	161	81	242
Bellevue Bellevue Gold Ltd.	2019	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2020	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	1.1%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Canadian Malartic ³	2019	1.8 %	228,467	874	229,341	0.34	0.00	0.34		1,626	6	1,632
Agnico Eagle Mines Ltd.	2020	1.6 %	210,457	1,100	211,557	0.37	0.00	0.37		1,619	8	1,627
	2021	1.5 %	219,283	1,025	220,308	0.30	0.00	0.31		1,270	6	1,276
	2022	1.0%	210,117	1,273	211,390	0.32	0.00	0.32		821	5	826
	2023	0.3%	250,725	1,283	252,008	0.36	0.00	0.36		271	1	273
	2024	0.1%	186,282	499	186,782	0.28	0.00	0.28	1st	71	0	72
Celtic/Wonder North	2019	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
Northern Star Resources Ltd.	2020	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.1%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Côté	2019	—	—	—	—	—	—	—		—	—	—
IAMGOLD Corporation	2020	—	—	—	—	—	—	—		—	—	—
	2021	—	—	—	—	—	—	—		—	—	—
	2022	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.5%	101,324	34,891	108,111	0.51	0.03	0.54	2nd	624	42	666
Dolores	2019	1.9%	93,898	46,883	140,781	0.53	0.26	0.79		2,666	1,331	3,996
Pan American Silver Corporation	2020	1.5%	87,521	43,884	131,405	0.62	0.31	0.92		2,492	1,250	3,742
	2021	2.0%	64,650	38,516	103,166	0.35	0.21	0.55		1,964	1,170	3,134
	2022	1.9%	48,116	16,206	64,322	0.30	0.10	0.39		1,501	506	2,007
	2023	1.6%	31,889	15,514	47,403	0.24	0.12	0.36		983	478	1,462
	2024	1.1%	24,135	34,891	59,026	0.26	0.38	0.64	3rd	737	1,066	1,803

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Don Nicolas ³	2019	0.0%	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Cerrado Gold, Inc.	2020	0.4%	15,979	0.00	15,979	0.94	0.00	0.94		1,074	0.00	1,074
	2021	0.2%	29,257	0.00	29,257	0.67	0.00	0.67		386	0.00	386
	2022	0.2%	28,522	0.00	28,522	0.53	0.00	0.53		340	0.00	340
	2023	0.1%	35,545	0.00	35,545	0.52	0.00	0.52		117	0.00	117
	2024	0.4%	36,919	0.00	36,919	0.68	0.00	0.68	3rd	743	0.00	743
El Limón	2019	0.6%	41,434	14,738	56,171	0.66	0.23	0.89		1,142	406	1,548
Equinox Gold	2020	0.9%	35,308	13,088	48,396	0.54	0.20	0.75		1,273	472	1,745
	2021	1.0%	35,912	16,735	52,646	0.53	0.25	0.78		1,433	668	2,101
	2022	1.2%	21,668	0.00	21,668	0.28	0.00	0.28		887	0.00	887
	2023	1.1%	24,849	0.00	24,849	0.34	0.00	0.34		937	0.00	937
	2024	1.2%	24,851	0.00	24,851	0.35	0.00	0.35	1st	1,066	0.00	1,066
Goldstrike ³	2019	0.9%	2,277,984	742,215	3,020,199	1.32	0.43	1.76		3,208	1,045	4,254
Nevada Gold Mines LLC (Goldstrike and Carlin were combined by Nevada Gold Mines for reporting purposes starting in 2019 and are referred to as Carlin.)	2020	0.7%	1,749,640	526,175	2,275,816	1.05	0.32	1.37		2,044	615	2,659
	2021	0.6%	1,792,700	320,000	2,112,700	1.19	0.21	1.41		2,005	358	2,363
	2022	0.7%	1,924,900	148,000	2,072,900	1.17	0.09	1.26		2,027	156	2,183
	2023	0.3%	1,758,200	96,000	1,854,200	1.25	0.07	1.31		1,013	55	1,069
	2024	0.3%	1,928,400	85,155	2,013,555	1.53	0.07	1.60	4th	1,120	49	1,169
Granite Creek	2019	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
i-80 Gold Corp.	2020	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.2%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Gwalia ³	2019	1.0%	74,803	0.00	74,803	0.41	0.00	0.41		1,129	0	1,129
Genesis Minerals Limited	2020	0.9%	86,500	0.00	86,500	0.56	0.00	0.56		1,270	0	1,270
	2021	0.9%	93,000	0.00	93,000	0.49	0.00	0.49		1,278	0	1,278
	2022	0.8%	90,218	0.00	90,218	0.57	0.00	0.57		1,277	0	1,277
	2023	0.7%	101,435	0.00	101,435	0.56	0.00	0.56		1,082	0	1,082
	2024	0.7%	97,905	1,132	99,037	0.65	0.01	0.65	3rd	1,094	13	1,107
Khoemacau	2019	—%	—	—	—	—	—	—		—	—	—
MMG Limited (formerly Khoemacau Copper)	2020	—%	—	—	—	—	—	—		—	—	—
	2021	0.7%	22,069	87,148	109,218	0.18	0.72	0.90		373	1,473	1,846
	2022	3.1%	44,139	174,296	218,435	0.19	0.77	0.96		1,608	6,351	7,959
	2023	5.4%	39,949	134,235	174,184	0.19	0.64	0.83		2,657	8,929	11,587
	2024	4.3%	39,233	149,100	188,333	0.26	0.99	1.25	4th (Cu)	2,906	11,045	13,951
King of the Hills	2019	0.4%	NR	NR	NR	NR	NR	NR		NR	NR	NR
Vault Minerals Limited	2020	0.2%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.03%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.2%	87,061	0.00	87,061	1.25	0.00	1.25		635	0	635
	2023	0.8%	159,974	0.00	159,974	0.76	0.00	0.76		1,639	0	1,639
	2024	0.9%	166,373	0.00	166,373	0.83	0.00	0.83	3rd	1,851	0	1,851
LaRonde Zone 5 ³	2019	0.5%	38,306	861	39,167	0.09	0.00	0.09		116	3	119
Agnico Eagle Mines Ltd.	2020	0.4%	31,861	204	32,065	0.09	0.00	0.09		100	1	100
	2021	0.4%	35,820	217	36,037	0.09	0.00	0.09		107	1	108
	2022	0.6%	41,181	274	41,455	0.11	0.00	0.11		164	1	165
	2023	0.5%	38,880	259	39,139	0.12	0.00	0.12		152	1	153
	2024	0.6%	46,579	339	46,918	0.14	0.00	0.14	1st	214	2	216

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Leeville (North) ³ Nevada Gold Mines LLC (Scope 1 emissions included portions of emissions from the Western 102 and TS power plants.)	2019	0.3%	2,277,984	742,215	3,020,199	1.32	0.43	1.76		1,123	366	1,489
	2020	0.3%	1,749,640	526,175	2,275,816	1.05	0.32	1.37		976	294	1,270
	2021	1.0%	1,792,700	320,000	2,112,700	1.19	0.21	1.41		3,519	628	4,147
	2022	0.9%	1,924,900	148,000	2,072,900	1.17	0.09	1.26		2,731	210	2,941
	2023	1.1%	1,758,200	96,000	1,854,200	1.25	0.07	1.31		3,678	201	3,879
	2024	1.3%	1,928,400	85,155	2,013,555	1.53	0.07	1.60	4th	5,089	225	5,314
Manh Choh Kinross Gold Corporation	2019	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2020	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	1.7%	256,859	220,425	477,284	0.54	0.46	0.99	4th	2,397	2,057	4,453
Mara Rosa Hochschild Mining plc	2019	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2020	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.0%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.7%	16,141	5,726	21,867	0.25	0.09	0.34	1st	455	162	617
Marigold ³ SSR Mining Inc.	2019	1.5%	101,861	10,284	112,145	0.46	0.05	0.51		1,869	189	2,058
	2020	1.7%	138,792	10,616	149,408	0.59	0.05	0.64		2,741	210	2,951
	2021	1.6%	152,504	12,906	165,410	0.65	0.05	0.70		3,022	256	3,278
	2022	1.3%	150,063	16,622	166,685	0.65	0.07	0.72		2,210	245	2,455
	2023	1.0%	132,143	18,973	151,115	0.51	0.07	0.58		1,340	192	1,532
	2024	1.3%	131,928	23,768	155,697	0.78	0.14	0.93	3rd	2,658	479	3,137

Mineral Property/Operator	Year¹	Royal Gold Net GEOs² (%)	Operator Emission Estimates⁴			Operator Emission Intensity², ⁴			GHG Emissions Intensity Quartile Ranking⁸	RGLD Attributed Emissions⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO₂e)			(tCO₂e/GEO)				(tCO₂e)		
Meekathara³	2019	0.7%	122,832	0.00	122,832	0.71	0.00	0.71		1,408	0.00	1,408
Westgold Resources Ltd.	2020	0.8%	145,905	0.00	145,905	0.80	0.00	0.80		1,676	0.00	1,676
	2021	0.7%	148,748	0.00	148,748	0.78	0.00	0.78		1,542	0.00	1,542
	2022	0.6%	142,447	0.00	142,447	0.71	0.00	0.71		1,161	0.00	1,161
	2023	0.4%	130,348	0.00	130,348	0.74	0.00	0.74		810	0.00	810
	2024	0.1%	86,533	0.00	86,533	0.611	0.00	0.611	3rd	114	0.00	114
Peñasquito	2019	4.1%	300,254	475,382	775,635	0.45	0.72	1.17		4,945	7,829	12,774
Newmont Corporation	2020	7.1%	321,156	577,458	898,614	0.24	0.44	0.68		4,658	8,375	13,032
	2021	8.2%	418,372	578,188	996,560	0.28	0.38	0.66		6,461	8,929	15,390
	2022	7.6%	436,674	587,649	1,024,323	0.32	0.43	0.76		6,469	8,706	15,175
	2023	3.4%	226,563	359,527	586,090	0.38	0.61	1.00		3,348	5,313	8,660
	2024	7.7%	345,541	555,842	901,383	0.33	0.53	0.86	3rd	6,639	10,680	17,319
Rainy River	2019	5.5%	142,871	2,254	145,125	0.56	0.01	0.56		8,178	129	8,307
Coeur Mining, Inc.	2020	4.7%	138,485	5,462	143,947	0.59	0.02	0.62		7,498	296	7,793
	2021	5.2%	142,994	5,899	148,893	0.59	0.02	0.62		8,713	359	9,072
	2022	5.0%	131,384	8,208	139,592	0.56	0.03	0.60		7,366	460	7,827
	2023	5.8%	127,029	12,459	139,488	0.49	0.05	0.54		7,376	723	8,099
	2024	5.6%	95,031	9,329	104,359	0.42	0.04	0.46	2nd	6,051	594	6,645
Red Chris	2019	—%	—	—	—	—	—	—		—	—	—
Newmont Corporation	2020	—%	—	—	—	—	—	—		—	—	—
	2021	—%	—	—	—	—	—	—		—	—	—
	2022	0.5%	92,283	8,538	100,821	0.54	0.05	0.59		707	65	773
	2023	0.6%	94,133	5,938	100,071	0.71	0.05	0.75		1,038	65	1,103
	2024	0.4%	101,311	5,148	106,459	0.79	0.04	0.83	3rd	819	42	861

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Robinson	2019	1.9%	149,061	329,614	478,675	0.64	1.42	2.07		3,276	7,244	10,519
KGHM International Ltd.	2020	2.2%	146,962	324,972	471,933	0.75	1.66	2.41		4,500	9,952	14,452
	2021	1.8%	146,962	324,972	471,933	0.60	1.32	1.92		3,117	6,891	10,008
	2022	1.9%	146,962	324,972	471,933	0.70	1.55	2.25		3,540	7,827	11,367
	2023	1.5%	104,973	232,123	337,095	0.82	1.81	2.62		3,116	6,890	10,005
	2024	2.5%	146,962	368,973	515,935	0.63	1.59	2.23	4th	4,120	10,344	14,465
Skyline	2019	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
Wolverine Fuels, LLC	2020	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.1%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.05%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.3%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
South Laverton ³	2019	1.1%	87,006	0.00	87,006	0.44	0.00	0.44		1,342	0	1,342
Northern Star Resources Ltd.	2020	2.2%	96,570	0.00	96,570	0.45	0.00	0.45		2,708	0	2,708
	2021	1.9%	150,238	0.00	150,238	0.59	0.00	0.59		3,244	0	3,244
	2022	1.3%	166,156	0.00	166,156	0.85	0.00	0.85		2,933	0	2,933
	2023	1.4%	151,848	0.00	151,848	0.61	0.00	0.61		2,282	0	2,282
	2024	1.4%	137,263	0.00	137,263	0.55	0.00	0.55	2nd	2,057	0	2,057
Southern Cross	2019	0.4%	40,369	57,690	98,059	0.25	0.36	0.61		269	384	653
Shandong Tianye Group	2020	0.3%	37,907	46,214	84,121	0.23	0.29	0.52		210	256	466
	2021	0.3%	35,834	53,765	89,599	0.22	0.33	0.55		212	317	529
	2022	0.3%	33,077	83,735	116,812	0.20	0.52	0.72		155	392	547
	2023	0.3%	33,077	83,735	116,812	0.20	0.51	0.71		164	416	581
	2024	0.4%	33,077	68,310	101,387	0.20	0.42	0.62	3rd	200	414	615

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Voisey's Bay	2019	2.0%	81,705	0.00	81,705	0.21	0.00	0.21		1,117	0.00	1,117
Vale S.A.	2020	1.5%	73,397	0.00	73,397	0.20	0.00	0.20		780	0.00	780
	2021	2.6%	83,745	0.00	83,745	0.21	0.00	0.21		1,557	0.00	1,557
	2022	1.5%	91,521	0.00	91,521	0.37	0.00	0.37		1,489	0.00	1,489
	2023	0.8%	93,134	0.00	93,134	0.64	0.00	0.64		1,326	0.00	1,326
	2024	1.0%	264,020	0.00	264,020	1.22	0.00	1.22	2nd (Cu)	3,290	0.00	3,290
Wassa	2019	4.4%	20,890	9,950	30,840	0.13	0.06	0.20		1,585	755	2,340
Chifeng Jilong Gold Mining Co., Ltd.	2020	5.0%	20,409	12,200	32,608	0.12	0.07	0.19		1,635	977	2,612
	2021	4.9%	26,820	69,770	96,590	0.17	0.45	0.62		2,422	6,302	8,724
	2022	5.2%	29,557	78,144	107,701	0.17	0.45	0.62		2,376	6,282	8,658
	2023	5.2%	27,544	95,700	123,244	0.12	0.41	0.53		1,609	5,592	7,201
	2024	6.3%	20,438	84,099	104,537	0.11	0.45	0.56	2nd	1,785	7,345	9,131
Wharf	2019	0.6%	33,715	37,674	71,389	0.40	0.44	0.84		668	746	1,414
Coeur Mining, Inc.	2020	0.7%	24,769	32,564	57,333	0.26	0.34	0.60		482	633	1,115
	2021	0.6%	50,928	14,694	65,622	0.55	0.16	0.71		995	287	1,282
	2022	0.5%	52,158	14,921	67,079	0.65	0.19	0.84		898	257	1,155
	2023	0.7%	56,405	12,700	69,105	0.58	0.13	0.72		1,092	246	1,337
	2024	0.5%	53,224	11,979	65,203	0.53	0.12	0.65	3rd	619	139	759
Williams ⁷	2019	0.6%	38,248	3,651	41,900	0.18	0.02	0.20		291	28	319
Barrick Gold Corporation	2020	0.7%	31,281	5,665	36,946	0.14	0.03	0.17		249	45	294
	2021	0.4%	21,000	5,000	26,000	0.14	0.03	0.17		177	42	219
	2022	0.2%	22,000	5,000	27,000	0.17	0.04	0.20		80	18	98
	2023	(0.2%)	20,000	5,000	25,000	0.14	0.04	0.18		-69	-17	-86
	2024	0.3%	18,000	5,000	23,000	0.13	0.04	0.16	1st	100	28	128

Mineral Property/Operator	Year ¹	Royal Gold Net GEOs ² (%)	Operator Emission Estimates ⁴			Operator Emission Intensity ^{2, 4}			GHG Emissions Intensity Quartile Ranking ⁸	RGLD Attributed Emissions ⁵		
			Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2		Scope 1	Scope 2	Scope 1 & 2
			(tCO ₂ e)			(tCO ₂ e/GEO)				(tCO ₂ e)		
Xavantina Ero Copper	2019	—%	—	—	—	—	—	—		—	—	—
	2020	—%	—	—	—	—	—	—		—	—	—
	2021	1.2%	3,052	1,653	4,705	0.08	0.04	0.12		279	151	430
	2022	3.1%	3,657	1,660	5,317	0.08	0.04	0.12		691	314	1,004
	2023	4.1%	2,620	1,190	3,810	0.04	0.02	0.06		462	210	671
	2024	5.0%	3,617	1,353	4,969	0.06	0.02	0.09	1st	820	307	1,127
Other Interests	2019	0.2%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2020	0.1%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2021	0.2%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2022	0.2%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2023	0.3%	NR	NR	NR	NR	NR	NR		NR	NR	NR
	2024	0.1%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Portfolio Emission Intensity Summary

Year¹	Royal Gold Net GEOs² (%)	RGLD Attributed Emissions⁵			Emission Intensity			Industry Quartile Ranking⁸
		Scope 1	Scope 2	Scope 1 & 2	Scope 1	Scope 2	Scope 1 & 2	
		(tCO₂e)			(tCO₂e/GEO)			
Properties With Emissions Estimates								
2019	98.7%	161,308	62,905	223,963	0.61	0.24	0.85	3rd
2020	99.1%	154,934	54,192	209,125	0.58	0.20	0.79	3rd
2021	99.4%	180,164	36,292	216,455	0.64	0.13	0.77	3rd
2022	99.4%	155,887	38,857	194,744	0.59	0.15	0.74	3rd
2023	99.2%	158,529	37,201	195,730	0.62	0.14	0.76	3rd
2024	97.9%	158,634	53,917	212,551	0.62	0.21	0.84	3rd
Properties Without Emissions Data⁶								
2019	1.3%	1,916	846	3,013				
2020	0.9%	1,423	498	1,921				
2021	0.6%	1,003	202	1,205				
2022	0.6%	880	219	1,099				
2023	0.8%	1,303	306	1,609				
2024	2.1%	3,481	1,183	4,664				
Total								
2019	100%	163,224	63,751	226,976	0.61	0.24	0.85	
2020	100%	156,357	54,690	211,046	0.58	0.20	0.79	
2021	100%	181,167	36,494	217,660	0.64	0.13	0.77	
2022	100%	156,767	39,076	195,843	0.59	0.15	0.74	
2023	100%	159,832	37,507	197,339	0.62	0.14	0.76	
2024	100%	162,115	55,100	217,215	0.62	0.21	0.84	

1. The Company changed its fiscal year end from June 30 to December 31, effective as of December 31, 2021. Accordingly, certain amounts in this table have been adjusted to reflect unaudited calendar year information.
2. GEO) production is estimated by multiplying the number of net metal or commodity units of which we take delivery, multiplied by the following standard set of commodity prices and divided by the stated gold price, with the same metal prices used for each year for comparative purposes: \$1,758/oz Au; \$20.54/oz Ag; \$6,185.82/t Cu; \$1,826.14/lb Pb; \$2,268.85/t Zn; \$13,672/t Ni; \$25,992/t Mo; \$31,161/t Co (see page 136 for complete definition).
3. Royal Gold's interest is either a portion of the mineral properties or part of a complex, and energy usage is assumed to be equally proportioned to all GEOs.
4. Mine site emissions estimates were compiled by Skarn Associates, and we have relied on its database for emissions presented for gold and copper mining operations.
5. Royal Gold's attributed emissions = Site emissions x Royal Gold % of site production.
6. Emissions intensity for mineral properties that were not included in the Skarn Associates database have been assumed to be equal to the average of the portfolio.
7. Prior year production adjustments occurred in 2023, resulting in negative production.
8. Industry quartile ranking is based both on Skarn Associates' emissions intensity curve for gold production (tCO₂e/oz Au) and the emissions intensity curve for copper production (CO₂e/t Cu). Operations are benchmarked against the gold production intensity curve unless otherwise indicated with the designation "(Cu)" indicating the ranking is based on the copper emissions intensity curve.
9. Scope 2 emissions are Market Based.