





Emeralds

Colombian emeralds are associated with streaks, hydrothermal breaks and hydraulic gaps that affect sedimentary sequences of the Paja, Rosablanca and Villeta Group formations in the eastern belt and the Limestone of Guavio and Macanal Shale formations in the western belt, of Early Cretaceous age.

Colombian gems have a natural red fluorescence originated by a reduced concentration of chemical impurities in their geological composition, they have low pressure and temperature, being a factor that makes the difference in quality. Emeralds from other countries are of pegmatitic origin, high temperature and pressure. The chromium content in many Colombian emeralds is ideal and allows optimal color, light and brightness.





937 **Mining Titles**



579,128 ha (0.51% of national territory)



131 in exploration* **131** in construction & assembly *

675

in exploitation*

*Titles by contractual stage

482

Mining concession proposals

252,262 ha (0.22% of national territory)

Source: NMA,- AnnA mineria 30/11/2023



Economic Data Colombia

	Production Associated to royalty payments (Million carats)	Royalties (Million USD)	Exports (Million carats - Million FOB USD)
2020	4.72	1.25	2.28 Mct - 42.96 M
2021 ^p	1.50	2.18	1.29 Mct - 129.78 M
2022 ^{pr}	1.25	2.07	1.29 Mct - 104.03 M





*2022 WORLD RANKING TRADE IN CUT GEMSTONES

(EMERALDS, RUBIES AND SAPPHIRES (710391-00/20))



EXPORTING COUNTRIES* (Main emeralds producing countries)

	(USD million
 Colombia Zambia 	84.85 37.94
3. Brazil	10.39

LATAM EXPORTS* (Emeralds producing countries)

	(USD million
 Colombia Brazil 	84.85 10.39

IMPORTING COUNTRIES*

		(USD million)
1.	United States	1,592.30
2.	Hong Kong	1,042.34
3.	Switzerland	559.43
4.	Thailand	473.86
5.	France	344.18
6.	Italy	231.75
7.	United Kingdom	197.23

Colombian emeralds are the first in the world for their quality, thanks to their hydrothermal sedimentary origin, which gives them an optimal brightness, transparency, color, play of light and hardness.



Emeralds



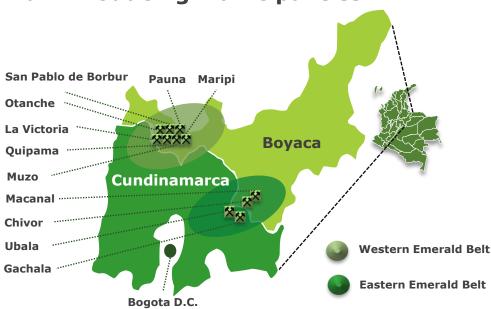
Production Data

	2019 (Carats)	2020 (Carats)	2021 P (Carats)	2022 pr (Carats)
Raw Set Cut	613,716 3 151,885	1,555,470 10 47,744	863,991 0 633,225	914,323 0 168,674
Unspecified Other qualities	1,013,519	3,117,799	2.226	160,843 9,010

Source: NMA - Mineral exploitation volumes associated with royalty payments, data as of October 31, 2023. P: provisional. Pr: preliminary. Mct: million carats.



Main Producing Municipalities



		Bogota D.C.				
Department	Municipality	Emeralds	2019 (Carats)	2020 (Carats)	2021 ^p (Carats)	2022 ^{pr} (Carats)
		Raw	391,766	1,360,738	676,048	764,463
		Set				
	Muzo	Cut	10,666	667	519,070	
		Unspecified				3,542
		Other qualities	998,870	3,117,799	624	
		Raw	64,351	481	2,678	5,487
	Ouinama	Set				
	Quipama	Cut	7,987	2,786	6,278	2,271
		Other qualities				
	San Pablo de Borbur	Raw	69,682	6,289	102,828	38,514
		Set	3	2		
Boyaca		Cut	40,466	13,754	16,133	27,338
		Unspecified				133,644
		Other qualities	12,664			
	Maripi	Raw	86,367	168,551	73,019	105,175
		Set		7		
		Cut	90,334	30,413	87,309	136,410
		Unspecified				22,082
		Other qualities	1,934		1,603	9,010
		Raw	1,550	19,375	9,002	
	Other	Set				
		Cut	108			
		Other qualities				
	Gachala	Raw		37		24
Cundinamarca		Set				
		Cut	2,325	124	4,435	2,654
		Other qualities	51			
	Ubala	Raw			416	659
	UDAIA	Unspecified				1,575
Tot	tal		1,779,123	4,721,024	1,499,442	1,252,850



Emeralds



Colombian Emeralds Data

Emeralds accounted for **0.18%** of the value of Colombian exports and **0.63%** of mining exports in 2022.

Colombian emerald mining is carried out in underground operations with **technification processes** – **and new investments** in some of the main mining projects in operation, such as the Puerto Arturo and Coscuez mines.

In 2022^{pr}, emeralds accounted for **0.11%** (*USD 2.07 million*) of the mining royalties collected.

The price per carat of each emerald can vary according to the purity and color of each gem (quality), the estimated value per carat of a cut emerald can range from USD 200 to USD 150,000.

Colombian emeralds **have very typical inclusions** that become their hallmark that differentiate them from the emeralds from other producing countries.

Source: ANM 31/10/2023 , DANE, SIMCO - UPME, ITC - Trade Map, Average exchange rate 2020: Col \$3,693.36; 2021: Col \$3,743.09; 2022 : Col \$4.255,44. * Percentages by value of exports.

Colombian emerald exports are transported by air. Main destinations of cut emeralds 2022*: United States 53.45%; Hong Kong 16.31%; Thailand 9.71%; Japan 6.73%; Israel 3.05%; India 2.63%; Singapore 1.78%; Italy 1.53%; United Arab Emirates 1.27%; Switzerland 0.88%; Germany 0.71%; Canada 0.43%; Austria 0.32%; Monaco 0.25%; France 0.15%; Slovakia 0.12%; Australia 0.11%; Spain 0.10%; Kuwait 0.10%; Taiwan 0.09%; Indonesia 0.06%; Portugal 0.04%; New Zealand 004%; Belgium 0.03%; Czech Republic 0.02%; Armenia 0.02%; Turkey 0.02%; Brazil 0.02%; United Kingdom 0.01%; Chile 0.004% Sri Lanka 0.004%; Slovenia 0.001% and Other countries 0.01%.

Main destinations of raw emeralds during 2022*: Bogota Free Zone 52.96%; United States 32.76%; Hong Kong 13.50%; Japan 0.21%; Monaco 0.17%; Canada 0.09%; Australia 0.07%; Spain 0.05%; Thailand 0.05%; Germany 0.05%; Switzerland 0.03%; Brazil 0.02%; Slovenia 0.01%; United Arab Emirates 0.01%; Turkey 0.002%; and Taiwan 0.001%.

"Of the producing countries, Colombia is the world's largest exporter of cut emeralds, with the highest quality gems in the world."