



SANOHA LTDA

MINING- ENVIRONMENT AND FORESTRY

WHO WE ARE



Privately family owned company held since the late 80's, has been mainly devoted to the exploitation of mineral resources of coal in central Colombia, developing mining small-scale underground and marketing their products permanently in the local industry and the international market.

The company has also established business in forestry environmental and engineering services.

SANOHA LTDA

WHO WE ARE



OUR ACHIEVEMENT

- Show the solid foundations of a structured Company that permanently builds society, under an excellent relationship with Workers, Suppliers, Clients, Communities, Institutions of the Environmental Mining Sector and Government Authorities, also exercising a guild leadership.
- Positioning of Boyacá coal in the domestic thermal coal market and continuous participation in the export market, with historical sales of more than 300,000 MT per year.
- Representative and Responsible mining ownership with 7 coal mining titles (5 in exploitation stage), 2 coking coal and 5 thermal coal with more than 12 million tons of R & R.
- 5 productive coal mining units active and ordered from any point of view. Of the 7 mining titles, 2 mining titles will be explored and put into operation and production.
- Representative shareholding in other commercial companies and companies with a recognized track record in the logistics field and exporter of coking coal (30% in COLOMBIAN COAL S. A.).
- Stock Center with good infrastructure and location, an area of 45,000 m² located in Nobsa, Boyacá. with an annual capacity of 300,000 MT.
- 20 Acres with request and project presented for the port concession of the Magdalena River, in Bocas del Carare Santander.

FAMILY OWNED COMPANY



01

LUIS GABRIEL
CHIQUILLO
COMPANY CEO

02

JAIME HUMBERTO
CHIQUILLO
OPERATIONS MANAGER

03

IBETH PUENTES
ADMINISTRATIVE DIRECTION

04

DORALBA LONDOÑO
SALES DEPARTMENT

SANOHA LTDA

WHAT WE DO



MINING

Exploration, exploitation and marketing of basic mineral deposits.



ENVIRONMENTAL AND FORESTRY

Planning and implementation of forestry projects, engineering services, logistics and investment participatory.



ENGINEERING

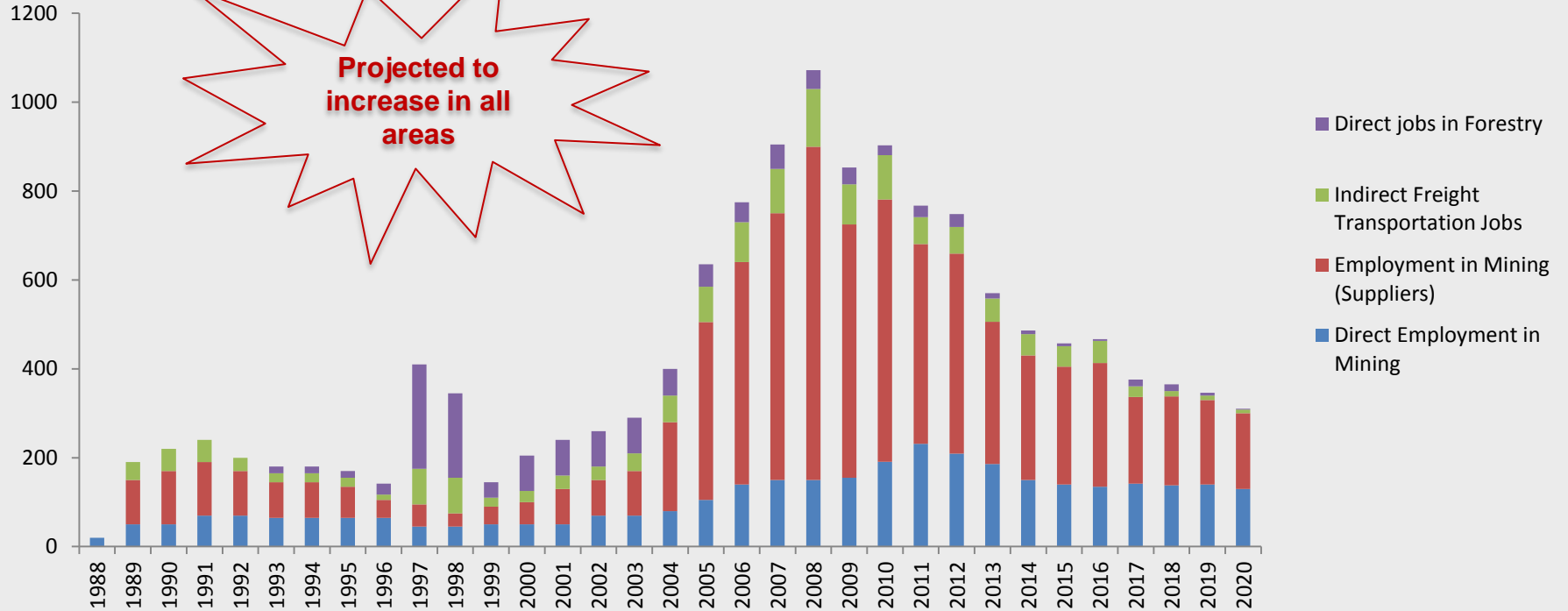
Experience and knowledge in preparation of studies and procedures for the granting of mining and environmental permits for mining projects.

STRENGTHS AND OPPORTUNITIES

- ❖ *History of more than 25 years in the mining sector*
- ❖ *Company that handles more thermal coal in the center of the country*
- ❖ *Recognition, credibility and representativeness, based on ethics and good practice*
- ❖ *Mining and land ownership. Mining operation with total adjustment to every law*
- ❖ *Proper knowledge of small-scale mining, coal resources and commercial dynamics of the coal business*
- ❖ *Know How, storage and laboratory infrastructure*
- ❖ *Specialized human resource identified with the mission and vision of the company*
- ❖ *Constant customer demand productivity and energy efficiency (modification of the benefit process system)*
- ❖ *High standards demanded in the exploitation and consumption*
- ❖ *Sanoha has successfully weathered the logistical difficulties of transportation to ports, using the experience of an efficient type of coal supply for export to the Valle del Cauca area during the last 25 years.*

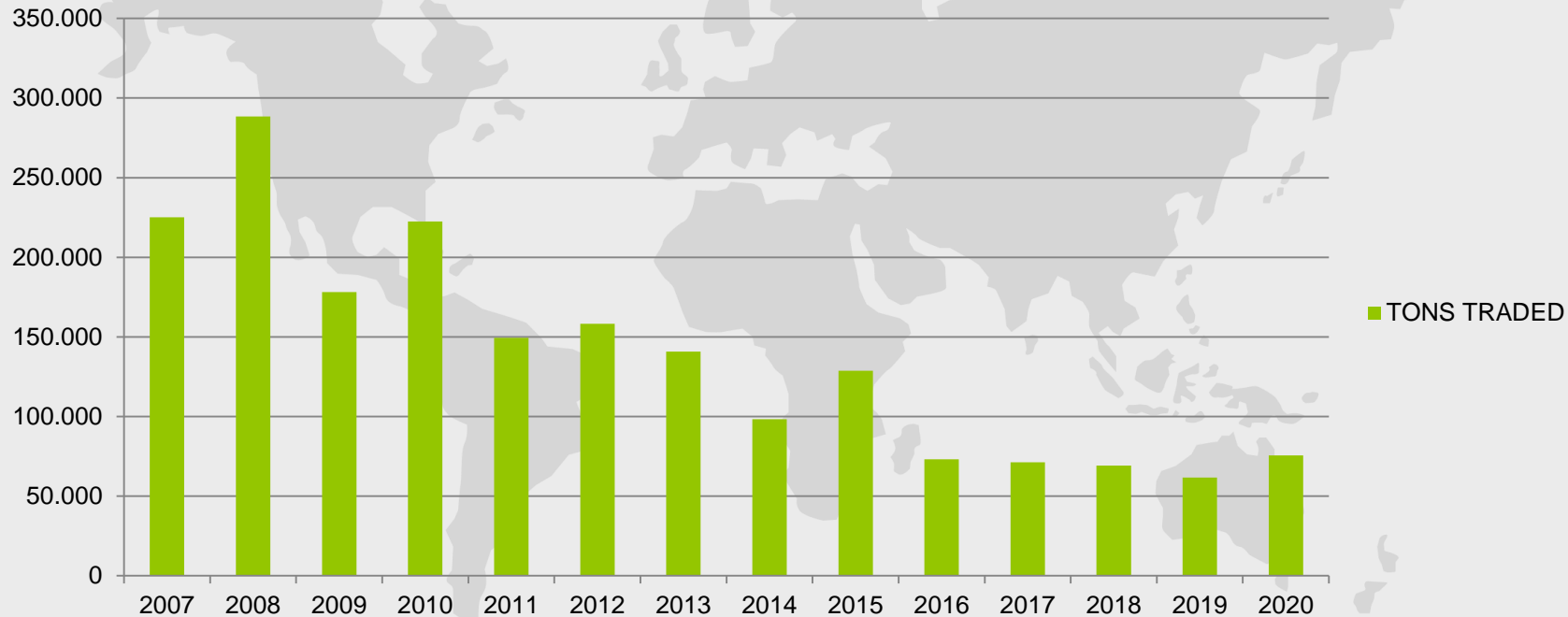
EVOLUTION OF EMPLOYMENT GENERATION

EMPLOYMENT GENERATION

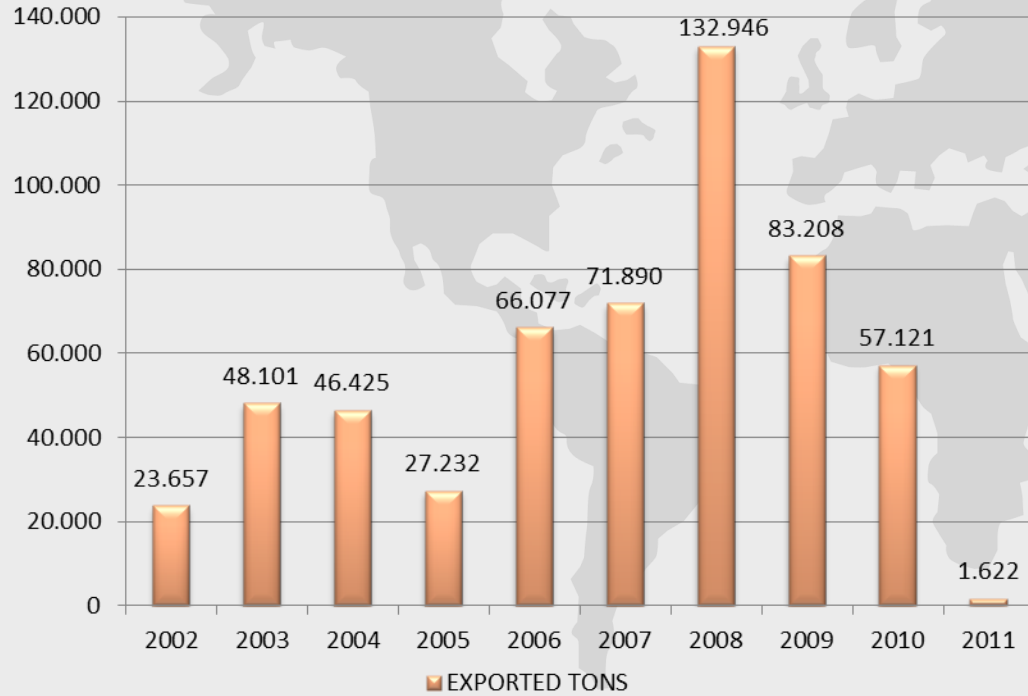


COAL TRADE HISTORY

TONS TRADED



INTERNATIONAL COAL TRADE HISTORY



The company in 2008 exported 46% of its total coal traded.

Sanoha's coal exporting process was made through INTERAMERICAN COAL leading supplier of thermal and metallurgical coal

Sanoha's coal destination included countries like Basil, Peru, Chile and Ireland.

ACTUAL MINING PROJECTS

COKING COAL

MINING TITLE	PROJECT	LOCATION	PHASE	LICENSE	TOTAL RESERVES AND RESOURCES (Ton.)	AREA (Ha.)	LAND OWNERSHIP
GCAO-02	CURITAL	SOCHA	Exploitation	YES	2.354.354	22.62	40%
FH9-083 (60%)	HOTICON - JERICO	JERICÓ	Exploration	In Process (Without Limitation)	6.592.000	244,73	EASEMENT CONTRACT
TOTAL					8.946.354	267,35	

QUALITIES IN METALURGICAL PROJECTS

METALLURGICAL COAL

ANALYSIS		JERICO PROJECT				CURITAL PROJECT			
		MANTLE 1	MANTLE 2	MANTLE 3	MANTLE 4	MANTLE 3	MANTLE 4	MANTLE 5	MANTLE 6
Residual Humidity	%	2.75	2.35	3.23	4.44	1,89	2,58	0,87	2,11
Ash	%	3.92	5.55	4.74	5.13	13,44	14,12	11,47	6,89
Total Sulfur	%	0.72	0.82	0.69	0.74	0,86	1,14	4,17	1,5
Volatile Matter	%	14.69	16.69	19.17	18.75	22,45	23,05	25,4	21,33
Carbon	%	78.64	75.41	72.86	71.68	62,21	60,25	62,26	69,69
Heating Power	Cal/gr	7860	7620	7290	7260	7280	7356	7369	7970
Swelling Index	FSI	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.5

ACTUAL MINING PROJECTS

THERMAL COAL

MINING TITTLE	PROJECT	LOCATION	PHASE	ENV. LICENSE.	TOTAL RESERVES AND RESOURCES (Ton.)	AREA (Ha.)	LAND OWNERSHIP
066-91	SANOHA	MONGUI	Exploitation	SI	11.584.984	131.93	60%
AE4-081	LA ESCALERA	TASCO	Exploration	SI	645.853	11.10	EASEMENT CONTRACT
EB6-111	CHICAMOCHA	BETEITIVA	Exploitation	SI	17.283.946	164.76	70%
CET-101	EL CAZADERO	GAMEZA	Exploration	SI	1.072.353	18.05	100%
FCC-101	SALITRE – EL BANCO	TASCO	Exploration	In Process Without limitation)	12.631.056	140.41	EASEMENT CONTRACT
TOTAL					43.218.192	466,25	

QUALITIES IN THERMAL PROJECTS

THERMAL COAL									
ANALYSIS		THE BANCO PROJECT				CHICAMOCHA PROJECT			
		MANTLE 4	MANTLE 5	MANTLE 6	MANTLE 7	MANTLE 2	MANTLE 3	MANTLE 5	MANTLE 6
Residual Humidity	%	2.02	2,12	2,28	2,57	4,57	3.33	3.86	2,67
Total Humidity	%	2.34	2.52	2.89	2.96	3,05	5.59	3.94	4,87
Ash	%	7.00	15.76	9.76	9.01	9,25	6.28	6.45	7,82
Total Sulfur	%	0,85	1.54	0.81	0.83	1,43	0.89	1.11	1,14
Volatile Matter	%	40.73	36.87	36.29	39.84	32,87	41.24	40.1	36,52
Carbon	%	50.25	45.25	51.66	48.58	61,21	49.15	49.59	52,99
Heating Power	Cal/gr	7520	6570	7380	7060	7716	7340	7050	7770
FSI		3	3	3	2	3,5	1	2	3

QUALITY AND VOLUMES OF COAL AVAILABLE

THERMAL COAL TYPE A

BENEFIT PROCESS HOMOGENIZATION
SIZES 0-50 mm Y 0-75 mm
PRESENTATION BULK

QUALITY PARAMETERS	Total Humidity %	ASH %	Volatile Matter %	Fixed Carbon %	HIGHER CALORIFIC POWER-Btu/Lb	HIGHER CALORIFIC POWER-Kcal/Kg	TOTAL SULFUR %	FSI	HGI
		6	12,5	38	43,5	12420	6900	< 1.1	<3

VOLUME OF COAL AVAILABLE MONTH-TONS 9000

THERMAL COAL TYPE B

BENEFIT PROCESS HOMOGENIZATION
SIZES 0-50 mm Y 0-75 mm
PRESENTATION BULK

QUALITY PARAMETERS	Total Humidity %	ASH %	Volatile Matter %	Fixed Carbon %	HIGHER CALORIFIC POWER-Btu/Lb	HIGHER CALORIFIC POWER-Kcal/Kg	TOTAL SULFUR %	FSI	HGI
		7	<14	38	41	11790	6550	< 1.25	<3

VOLUME OF COAL AVAILABLE MONTH-TONS 9000

QUALITY AND VOLUMES OF COAL AVAILABLE

GRANULATED THERMAL COAL HOUSE COAL

BENEFIT PROCESS SCREENING
 SIZES 30-110 mm
 PRESENTATION BULK

QUALITY PARAMETERS	Total Humidity %	ASH %	Volatile Matter %	Fixed Carbon %	HIGHER CALORIFIC POWER-Btu/Lb	HIGHER CALORIFIC POWER-Kcal/Kg	TOTAL SULFUR %	FSI	HGI
		5	<10	37	48	12600	>7000	< 1.1	<2

VOLUME OF COAL AVAILABLE MONTH-TONS 4000

GRANULATED THERMAL COAL

BENEFIT PROCESS SCREENING
 SIZES 10-30 mm
 PRESENTATION 1 BULK

PRESENTATION 2

PACKAGING SACKS 40 Kg

QUALITY PARAMETERS	Total Humidity %	ASH %	Volatile Matter %	Fixed Carbon %	HIGHER CALORIFIC POWER-Btu/Lb	HIGHER CALORIFIC POWER-Kcal/Kg	TOTAL SULFUR %	FSI	HGI
		5	<11.5	37	46,5	12600	>7000	< 1.1	<2

VOLUME OF COAL AVAILABLE MONTH-TONS 2000

QUALITY AND VOLUMES OF COAL AVAILABLE

GRANULATED THERMAL COAL

BENEFIT PROCESS SCREENING
SIZES 25-50 mm
PRESENTATION 1 BULK

PRESENTATION 2

PACKAGING SACKS 40 Kg

QUALITY PARAMETERS	Total Humidity %	ASH %	Volatile Matter %	Fixed Carbon %	HIGHER CALORIFIC POWER-Btu/Lb	HIGHER CALORIFIC POWER-Kcal/Kg	TOTAL SULFUR %	FSI	HGI
		5	<11.5	37	46,5	12600	>7000	< 1.1	<2

VOLUME OF COAL AVAILABLE MONTH-TONS

2000

GRANULATED THERMAL COAL

BENEFIT PROCESS SCREENING
SIZES 25-75 mm
PRESENTATION 1 BULK

PRESENTATION 2

PACKAGING SACKS 40 Kg

QUALITY PARAMETERS	Total Humidity %	ASH %	Volatile Matter %	Fixed Carbon %	HIGHER CALORIFIC POWER-Btu/Lb	HIGHER CALORIFIC POWER-Kcal/Kg	TOTAL SULFUR %	FSI	HGI
		5	<11.5	37	46,5	12600	>7000	< 1.1	<2

VOLUME OF COAL AVAILABLE MONTH-TONS

2000

MINING PROJECTION

The company has focused efforts to increase own production up to 250% in the next five years, thus reducing dependency in third parties. This will be achieved with some minor investments in existing mines to double its production joined to the development of three major projects.

“EL BANCO” SUBBLOQUE

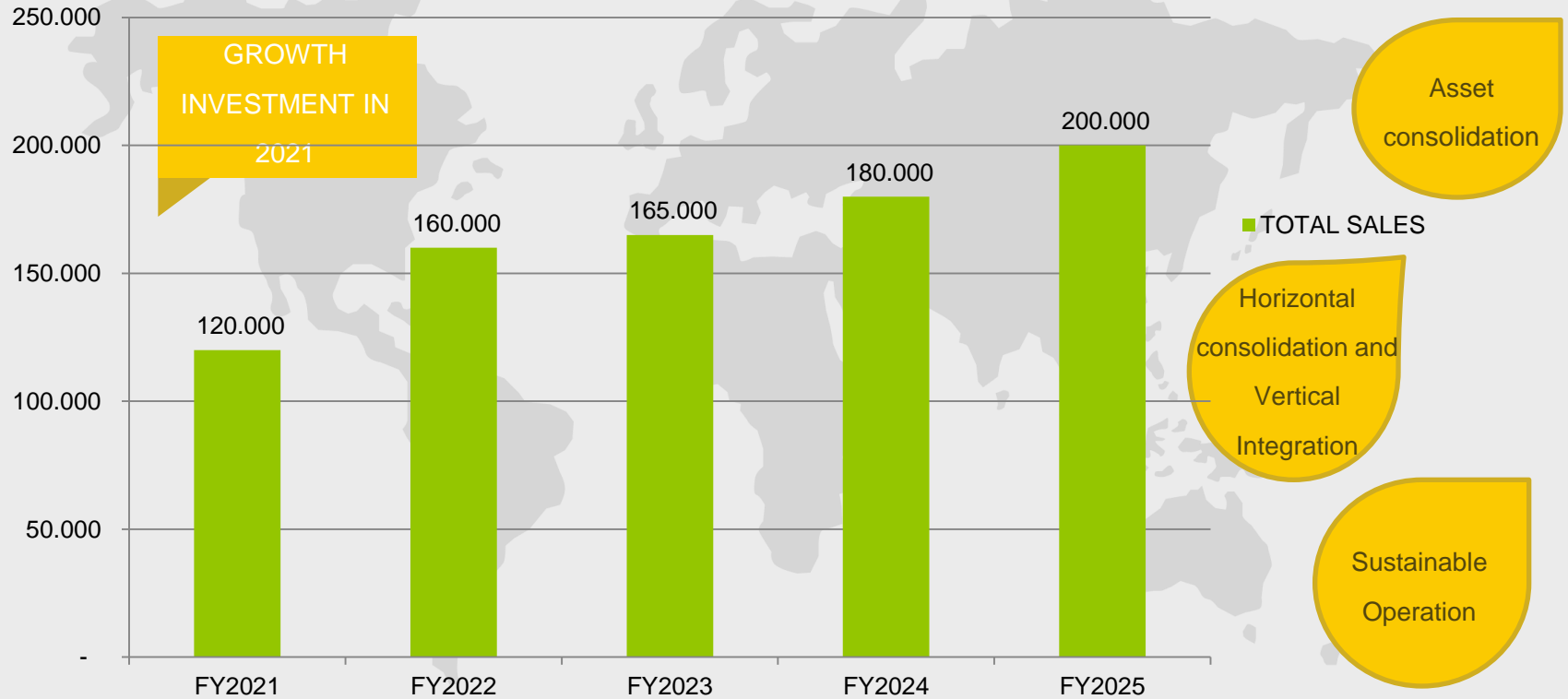
PEDREGAL- SALITRE:

- Thermal Coal
- Exploration stage
- Proven Resources: 13.650.000
- The assembly will take a year and will produce up to 15.000 Ton/month in the 6th year.

JERICO NORTH/ SOUTH:

- Coking Coal (low volatile)
- Exploration Stage
- Probable Resources: 6.592.000
- North: will begin production in 2020 con 5.000 ton./year and will reach up to 120.000 ton in the 6th year.
- South: Similar conditions to the previous one.

COAL TRADE PROJECTION



SANOHA LTDA

OBJECTIVE MARKET

CEMENT INDUSTRY



**THERMAL COAL (HOMOGENIZED
0*75mm) 6900 – 7200 cal./gr.**

**Historic High: 130.000/year
Current Sales: 50.000/year
Projection 100.000 Ton. /year.**

ENERGY GENERATION



**THERMAL COAL (HOMOGENIZED
0*75mm) 6500 – 7100 cal./gr.**

**Historic High: 80.000 Ton/year
Current Sales : 32.000 Ton./year
Projection : 90.000 Ton./year.**

TEXTILE/FLOWER/FOOD/ SELF-GENERATION INDUSTRIES

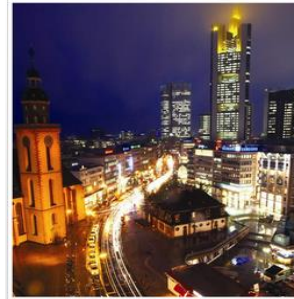


**THERMAL CLASSIFIED (6x25, 6x50,
50x75 m.m.)**

**Historic High: 70.000 Ton/year
Current Sales : 20.000 Ton /year
Projection: 80.000 Ton./year**

**EXPORT: House Coal, Sized Coal.
Current Sales: 0
Projection: 50.000 Ton. / year.**

STEEL INDUSTRY



**HIGH VOLATILE COAL
(Clean Binder FSI>5,0)
Current Sales : -0- Ton./year
Projection: 100.000 Ton. / year.**

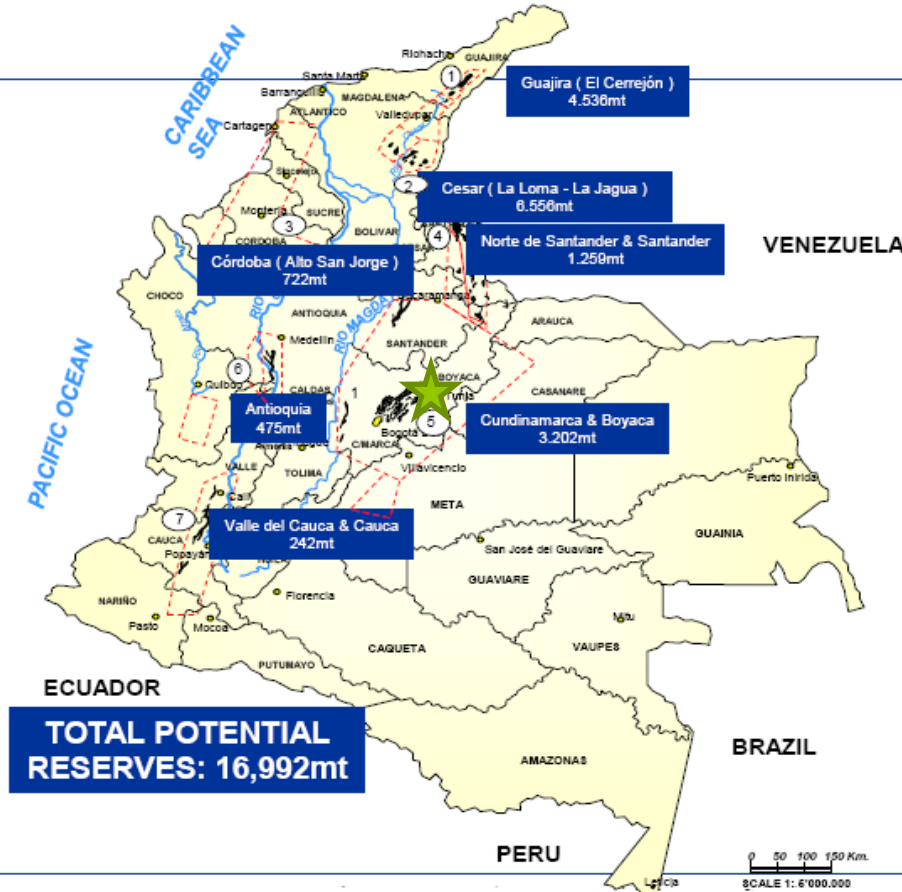
**NATIONAL AND EXPORT: Medium Volatile and
Low Voaltile
Historic High: 30,000 Ton/ year
Current Sales 6.000Ton./year
Projection : 50.000 Ton. / year**



ASIA AS AN OBJECTIVE MARKET

SANOHA LTDA

COLOMBIA'S POTENTIAL RESERVES



Area of where Sanoha's Mines are located .

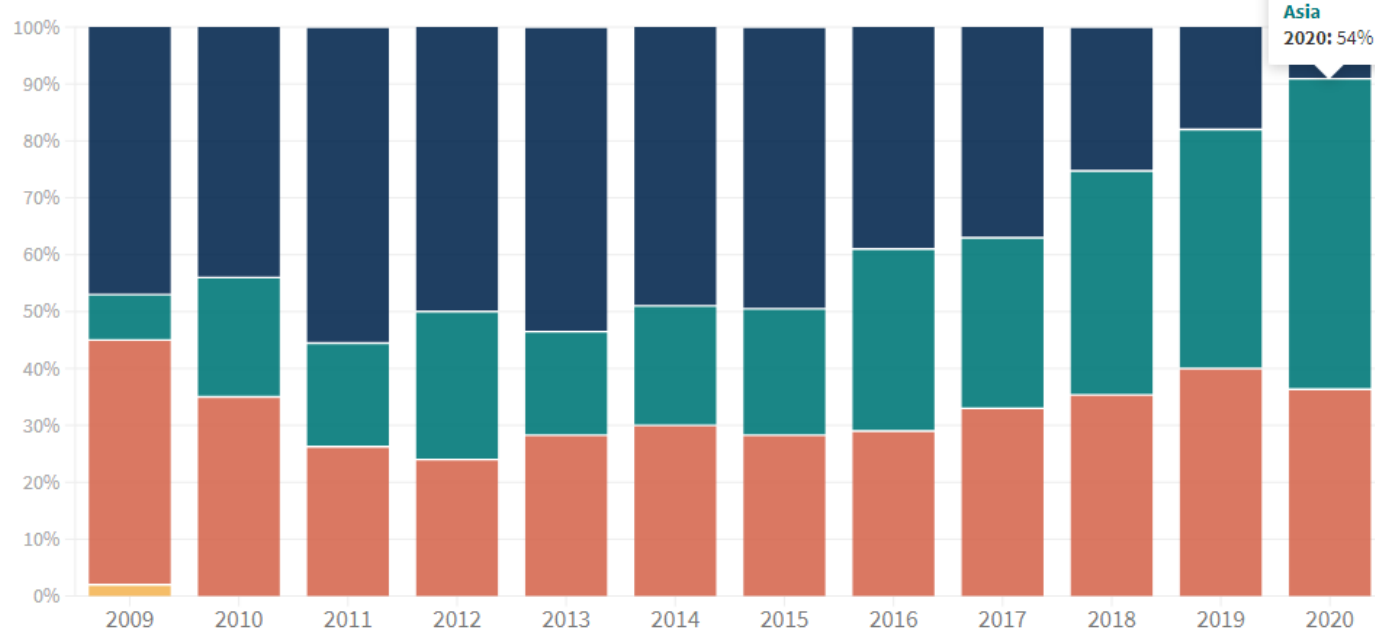
13 Mining Titles, 5 Coking Coal and 8 Thermal Coal with 132 Million ton R&R.

Investments are focused in projects located in the areas of Beteitiva, Monguí, Tasco, Jerico, Gameza in the department of Boyacá.

COLOMBIA'S COAL DESTINATION

Where does Colombia export its coal?

Africa Americas Asia Europe



Source: Colombian Mining Association



WHERE DOES CHINA STANDS IN THE COLOMBIAN MARKET ?

China imported 299.7 million tonnes of coal in 2019.

China, the world's biggest coal consumer, saw overall consumption of the fossil fuel increase by 0.6% in 2020 from a year earlier to around 4.04 billion tonnes



SCMP reported that China National Coal Association recently said that China's coal consumption is expected to continue rising in 2021 despite Beijing's pledges to boost the use of clean energy and curb greenhouse gas emissions.



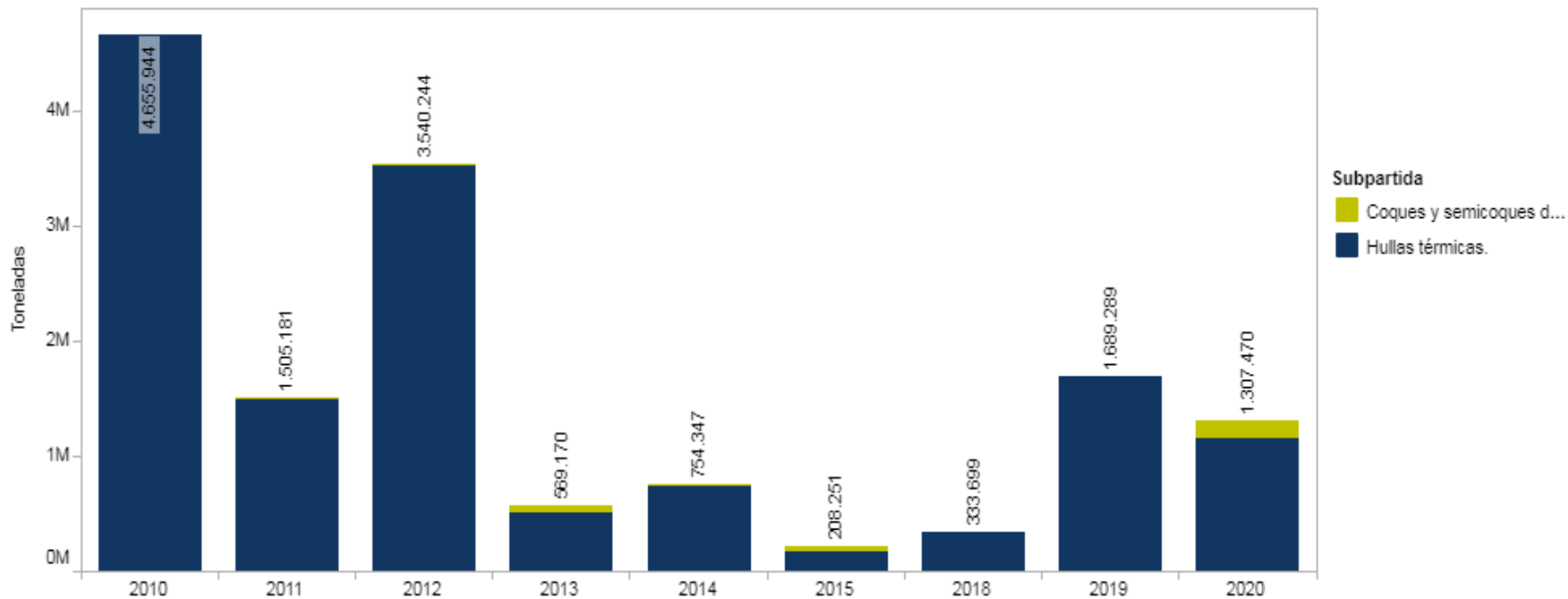
Coal

Chinese Coal Imports in 2020 up by 1.5%

Strategic Research Institute ·

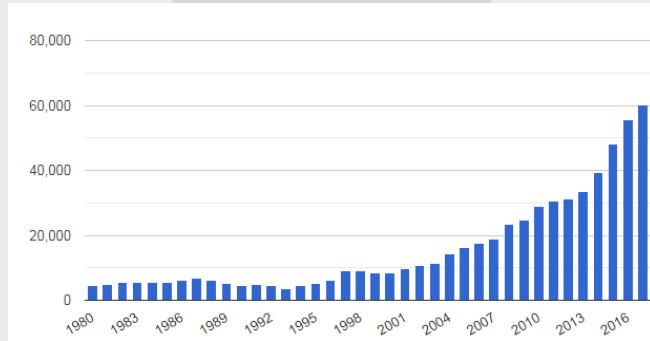
18 Jan, 2021 · 1 min read

COLOMBIAN COAL EXPORT FIGURES TO CHINA



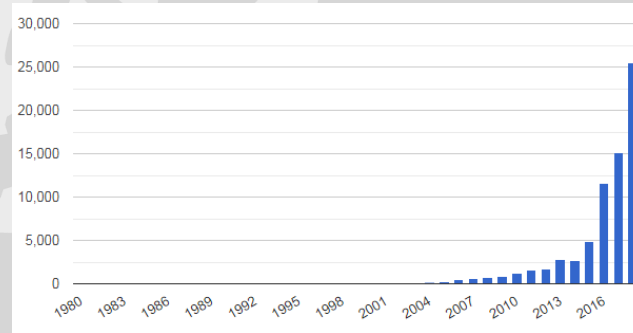
VIETNAM

COAL CONSUMPTION - SHORT TONS



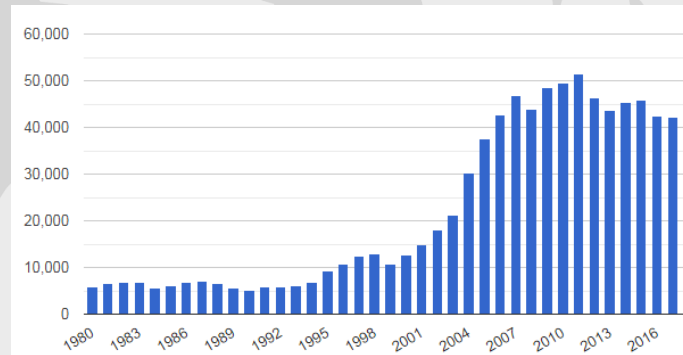
54.664 Tons by 2018

COAL IMPORTS - SHORT TONS



23.137 Tons by 2018

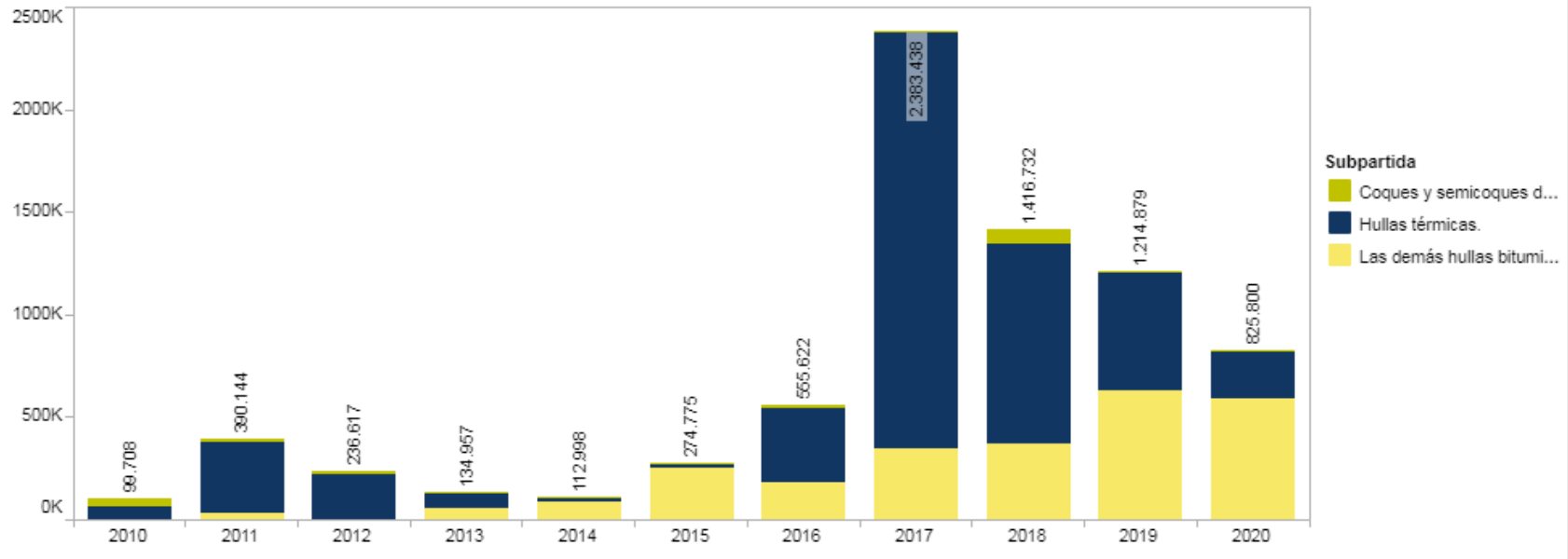
COAL PRODUCTION - SHORT TONS



41.361 Tons by 2018

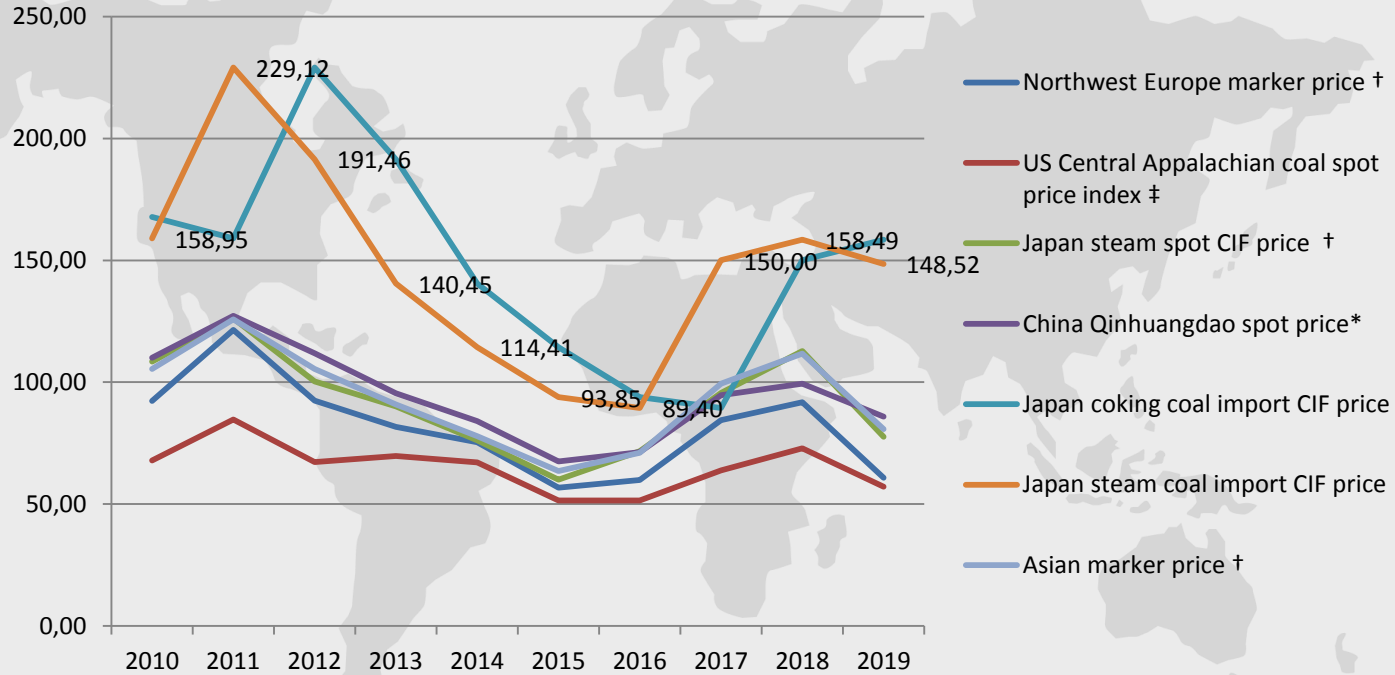
JAPAN

Colombian Coal exports to Japan



Source: DANE- DIAN

COAL PRICES



<https://www.bp.com/en/global/corporate/energy-economics/energy-charting-tool-desktop.html>

LOGISTICS FROM THE CENTER OF THE COUNTRY

CURRENT ROAD FREIGHT RATES TO PORTS AS OF MARCH 18-21

CITY-ORIGIN	DESTINATION CITY OR PORT	DISTANCE-Km	FREIGHT VALUE / TON \$COP	FREIGHT VALUE / TON \$USD
SOGAMOSO	BARRANQUILLA	912.3	\$120.000	\$33
SOGAMOSO	PUERTO BRISA	947.8	\$125.000	\$35
SOCHA	BARRANQUILLA	992.3	\$132.000	\$37
SOGAMOSO	BUENAVENTURA	729.2	\$102.000	\$28
SOCHA	BUENAVENTURA	809.2	\$106.000	\$29
SOGAMOSO	CALI	662.7	\$107.000	\$30

Exchange Rate Average for the current Month

\$3.603

FREIGHT RATE FROM COLOMBIAN PORT TO SOUTH EAST CHINA

Freight costs, are normally between US\$20 and \$25 per tonne between Puerto Bolivar in the Colombian Caribbean and south-east China.

STOCK YARD



STOCKYARD FACILITIES



SANOHA LTDA

THANK YOU



SANOHA LTDA

CONTACT US

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