

# Welcome to Semirara Island





Semirara  
Island

Taiwan

Hong-Kong

os

Vietnam

dia

Philippines

Brunei

Malaysia

Palau

Fe

Indonesia

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Google

# Site Location and Accessibility

Manila  
350 Km.

Calaca  
Batangas  
250 Km.

San Jose  
Occ. Mindoro  
50 Km.

Boracay/  
Caticlan  
60 Km.

Libertad  
Antique  
85 Km.



# Panian Mine Pit Progress



# Typical Coal Quality

Seam Number	Thickness Meter	Thickness Range		Heat Value Btu/Lb	Heat Value Range		Sulfur %	Sulfur Range		Ash %	Ash Range		Moisture %				
6	1.06	0.40	to	1.86	9,692	8,500	to	11,251	1.77	0.53	to	4.40	11.22	6.00	to	21.57	12.55
7	0.93	0.35	to	1.95	7,805	4,472	to	9,985	1.32	0.33	to	5.62	25.08	3.48	to	57.30	12.92
8	1.20	0.51	to	3.20	8,135	5,759	to	9,435	1.57	0.33	to	1.81	19.5	9.10	to	44.90	13.39
10	8.23	4.85	to	10.36	8,755	5,497	to	9,978	0.52	0.19	to	0.90	11.96	7.31	to	27.17	17.43
21	1.30	0.39	to	2.14	9,225	6,384	to	10,835	0.98	0.38	to	2.94	12.54	3.16	to	34.17	14.30
22	4.20	2.40	to	8.53	9,172	7,623	to	9,845	0.47	0.39	to	1.40	12.79	4.79	to	22.72	14.08
311	1.04	0.49	to	2.23	6,376	4,101	to	8,947	0.88	0.39	to	2.12	38.03	21.18	to	60.36	9.35
31	2.23	0.80	to	4.85	8,863	5,792	to	11,304	1.26	0.41	to	2.33	13.22	3.81	to	30.05	12.65
32	6.25	4.14	to	9.09	8,775	8,083	to	10,535	0.35	0.23	to	1.06	16.18	3.59	to	21.02	12.45
33	19.09	13.10	to	19.36	9,811	8,761	to	11,495	0.58	0.30	to	0.69	8.46	5.27	to	16.99	13.45
32/33	28.43	20.62	to	38.50	9,549	8,309	to	10,535	0.37	0.23	to	0.73	10.47	2.27	to	23.15	14.19
TOT/AVE	73.96	48.05	to	102.07	9,328	7,941	to	10,579	0.54	0.26	to	1.17	11.58	4.17	to	24.84	14.04

◆ Green font – Minor Seam

◆ Red font – Major Seam

# Mining Process





# Selective Coal Extraction







# Coal Washing Plant



# Coal Product Reclaiming



**Six (6) kms Conveyor Belt**

**1,500 mt per hour capacity**



**Conveyor Line**



*Stacker*

*Reclaimer*

*Reclaimer*



**Main Coal Blending Stockpile**

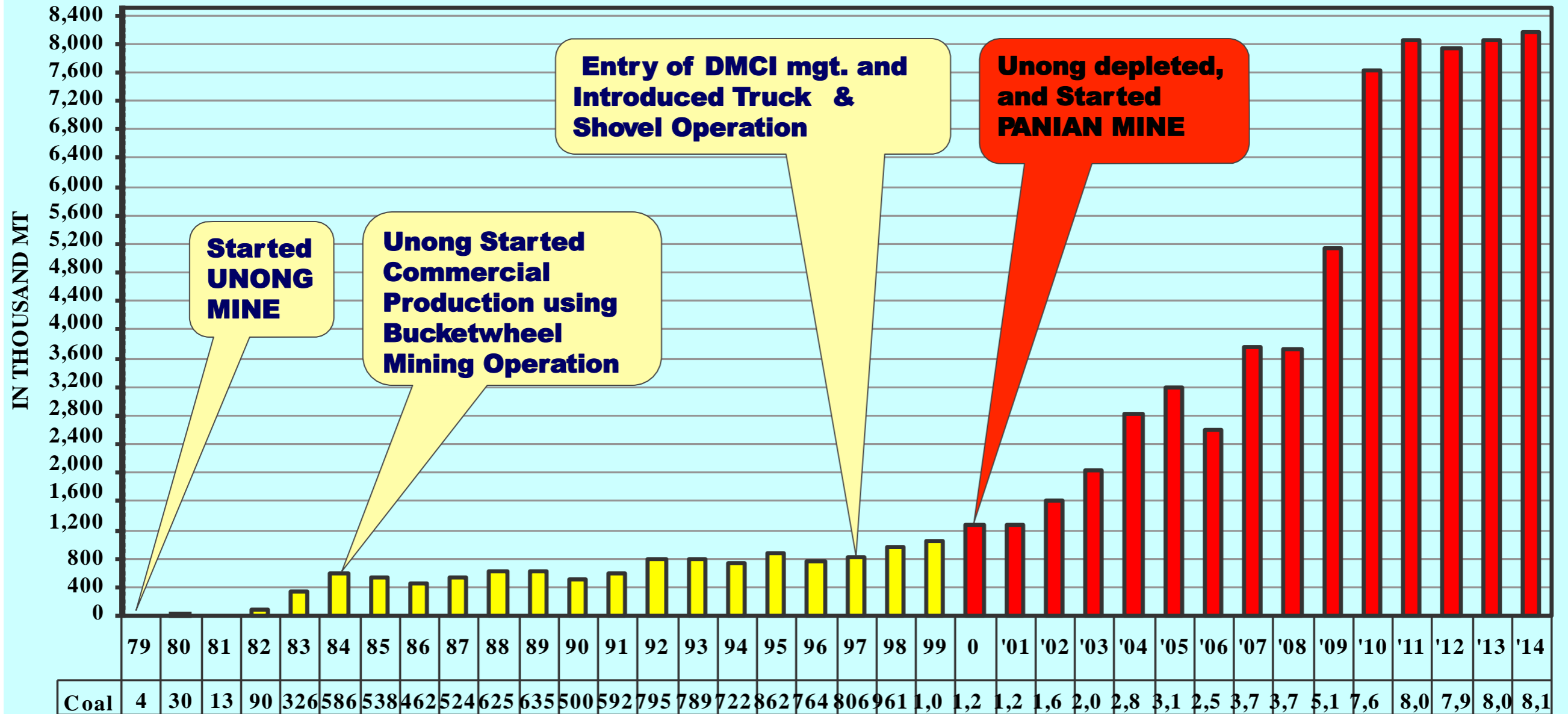


**Barge loading**



# Product Coal Ship Loading

# Historical Production



**TOTAL PRODUCTION: 11,719,000 MT (UNONG) ; 69,395,563 MT ( PANIAN ) AS OF DEC. 31, 2014**

# Mining Equipment



# Unong Mine Operation

- **Open Pit Mining System**
  - 4 Bucketwheel excavators, 1 waste spreader and associated conveyors.
  - Several trucks, shovels/loaders, and dozers as support equipments



Continuous Mining System



Four (4) Excavator 0 & K RH-120  
16 cu.m. bucket capacity



Eighth (8) units Komatsu PC3000 Excavator  
15 cu.m. bucket capacity



Eighth (8) Komatsu PC2000  
excavators  
12 cu.m. bucket capacity



One (1) Komatsu PC1250  
excavators  
7 cu.m. bucket capacity



**Komatsu HD 785 (100 tons cap.) 120 units**



**Nine (9) Units Bulldozers**  
**Seven (7) Units D375A-3,**  
**Two (2) Units D155A-1**



**Eight (8) Units Wheel Dozer**  
**Komatsu WD600-3**



**Six (6) Units Motor Graders**  
**Komatsu GD825A ,**



**Five (5) Units Komatsu water trucks**  
**(4) Units - 70,000 liters capacity**  
**(1) Units 40,000 liters capacity**



Small Power Shovel  
Ten (10) units



Grab Crane, Leibherr  
Two (2) units



KW- Lube Truck  
Four (4) units



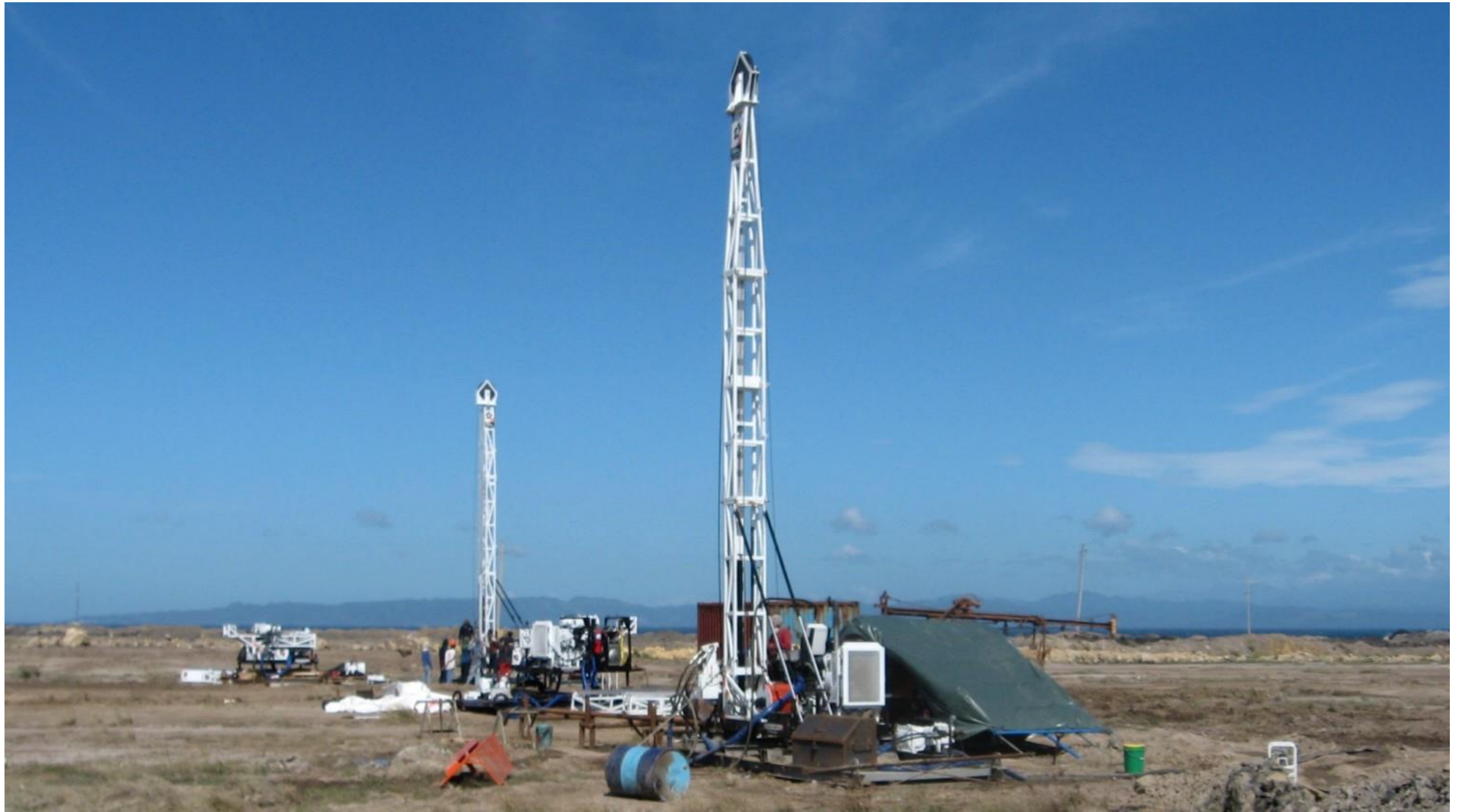
Drilling Machine, Atlas Copco  
One (1) unit



Small Backhoe ,PC400 Komatsu  
One (1) unit



# Major Support Equipment



Long Year LF-70  
Long Year NL-55

15 units  
11 units

26 units



**Drilling Equipment**

# Facilities







## Mine operation ( Panama) Office





**Additional One (1) unit 15 MW coal-fired power plant**



# **Additional Power Plant**



**Two (2) 4.2 MW Mirrlees Blackstone bunker engine**



**One (1) 5.7 MW Wartsila bunker engine**

# Analytical Laboratory



# COAL SHIPMENT

# SEMIRARA COAL USERS

**Asia Pacific Energy Corporation**  
Pampanga

**United Pulp and Paper Co., Inc.**  
Calumpit, Bulacan

**PNOC Exploration Corporation**  
North Harbor, Manila

**Jet Power Corporation**  
North Harbor, Manila

**Sem-Calaca Power Corporation**  
San Rafael, Calaca, Batangas

**Panay Energy Development Corporation**  
Iloilo, City

**Toledo Power Corporation**  
Toledo City, Cebu

**Cebu Energy Dev't Corporation**  
Toledo City, Cebu

**Eagle Cement Corporation**  
Bulacan

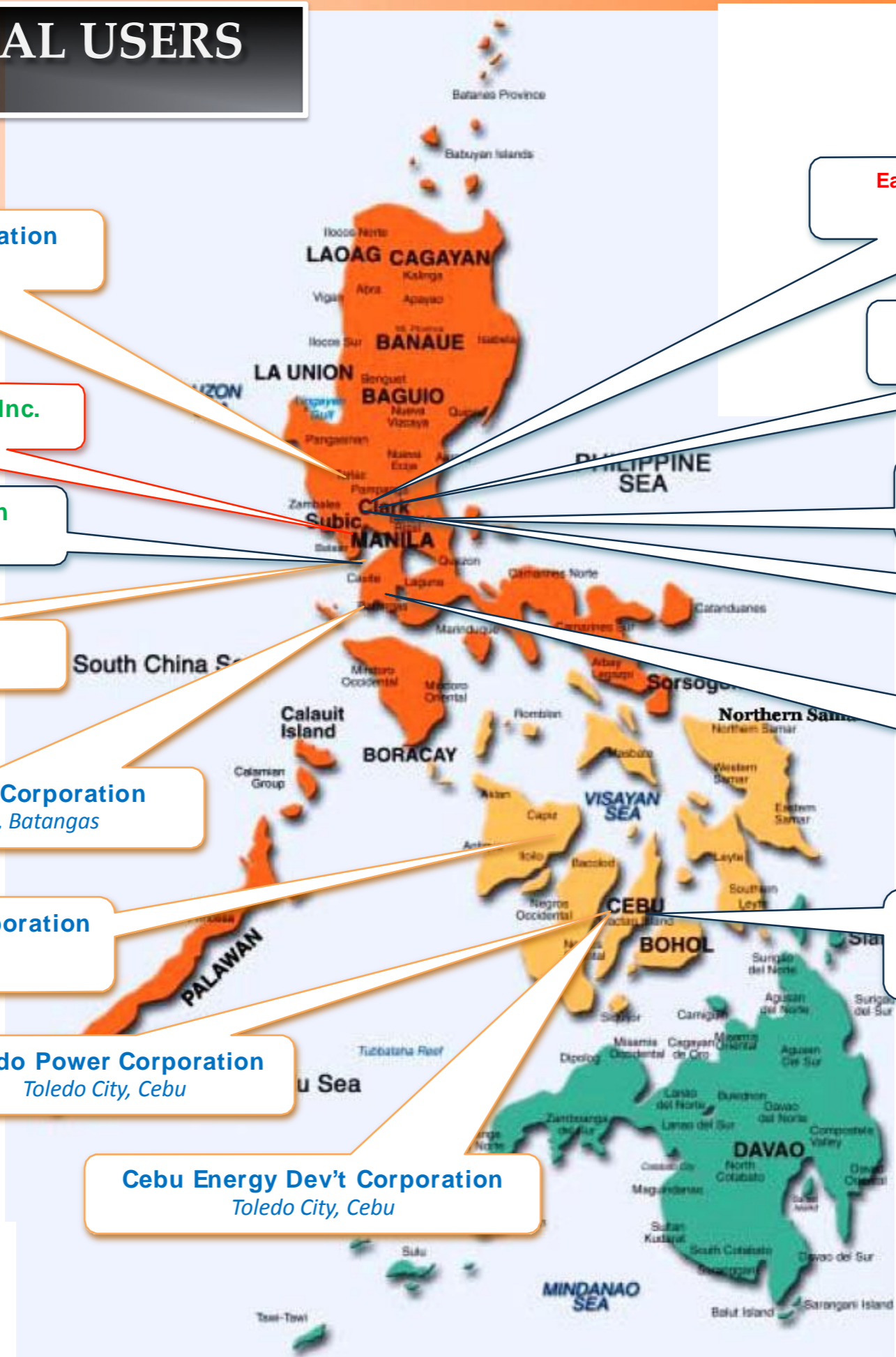
**HOLCIM Philippines Inc.**  
Norzagaray, Bulacan

**Solid Cement Corporation**  
AnBpolo City, Rizal

**Lafarge Cement Corporation**  
Bulacan

**Lafarge-Republic Cement Corporation**  
Batangas

**APO Cement Corporation**  
Naga, Cebu

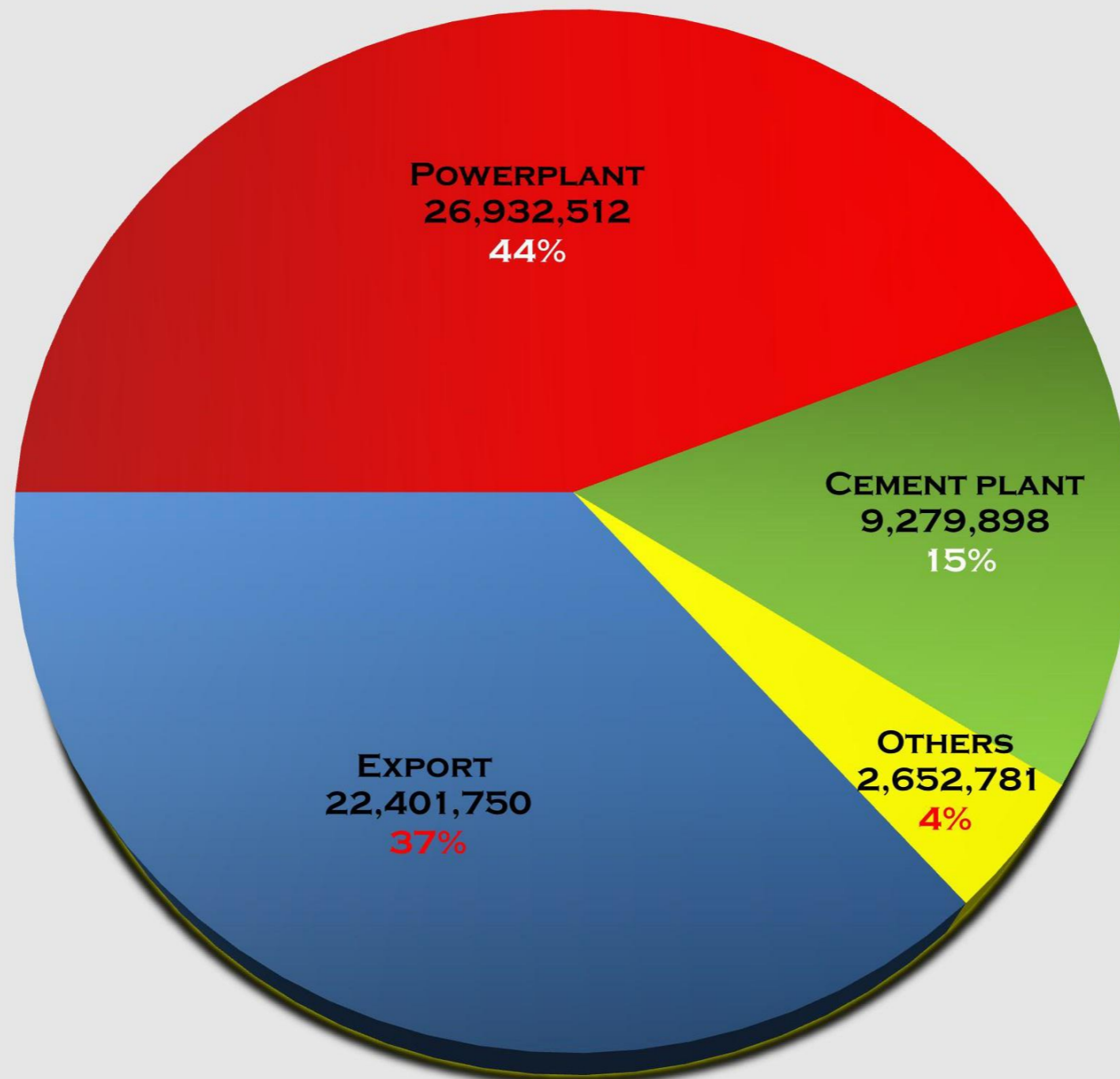


## Legend:

- Cement Plants
- Power Plants
- Other Plants

# HISTORICAL COAL SHIPMENT SUMMARY

STARTED YEAR 2000 TO 2014

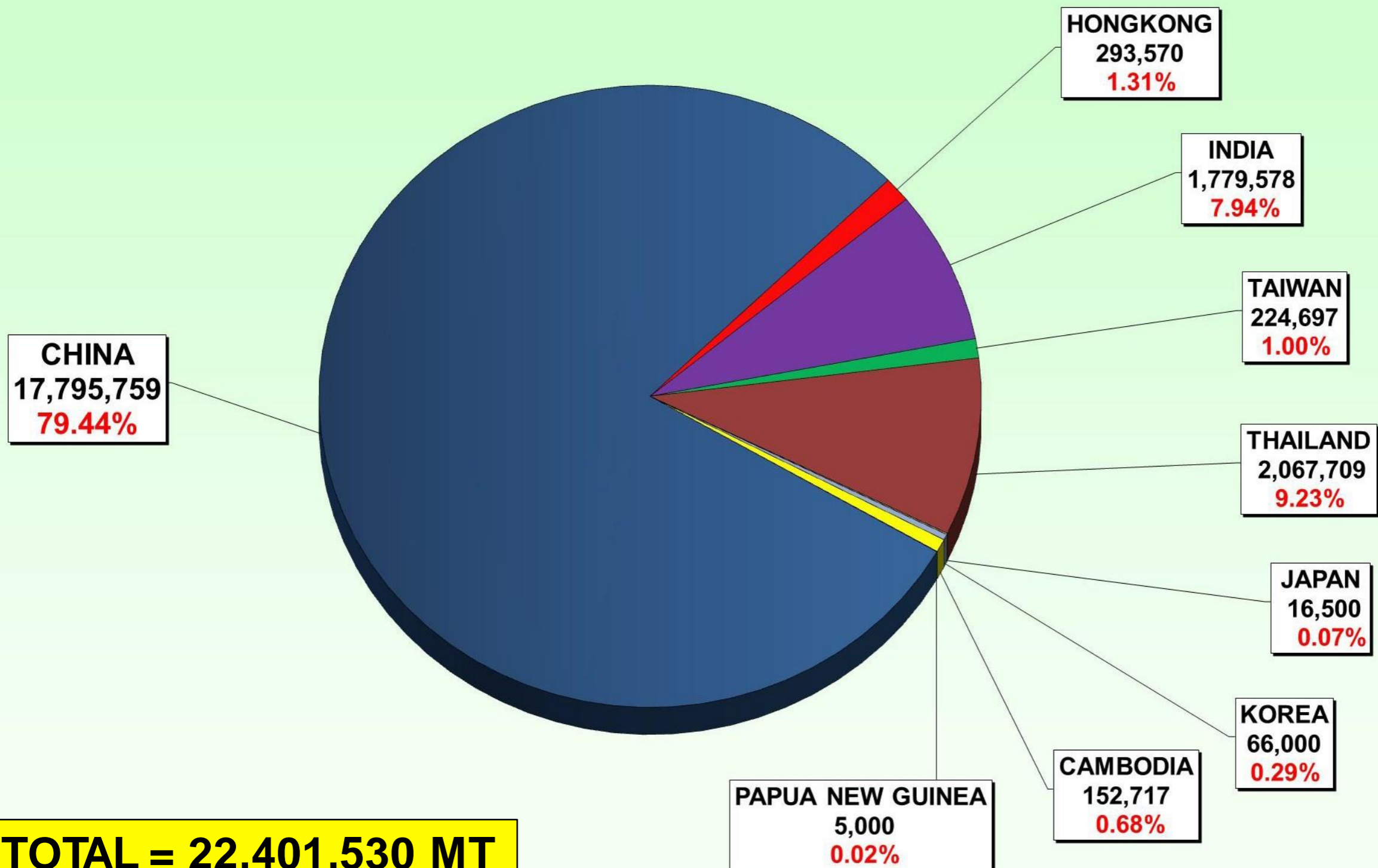


**TOTAL = 61,266,719 MT**



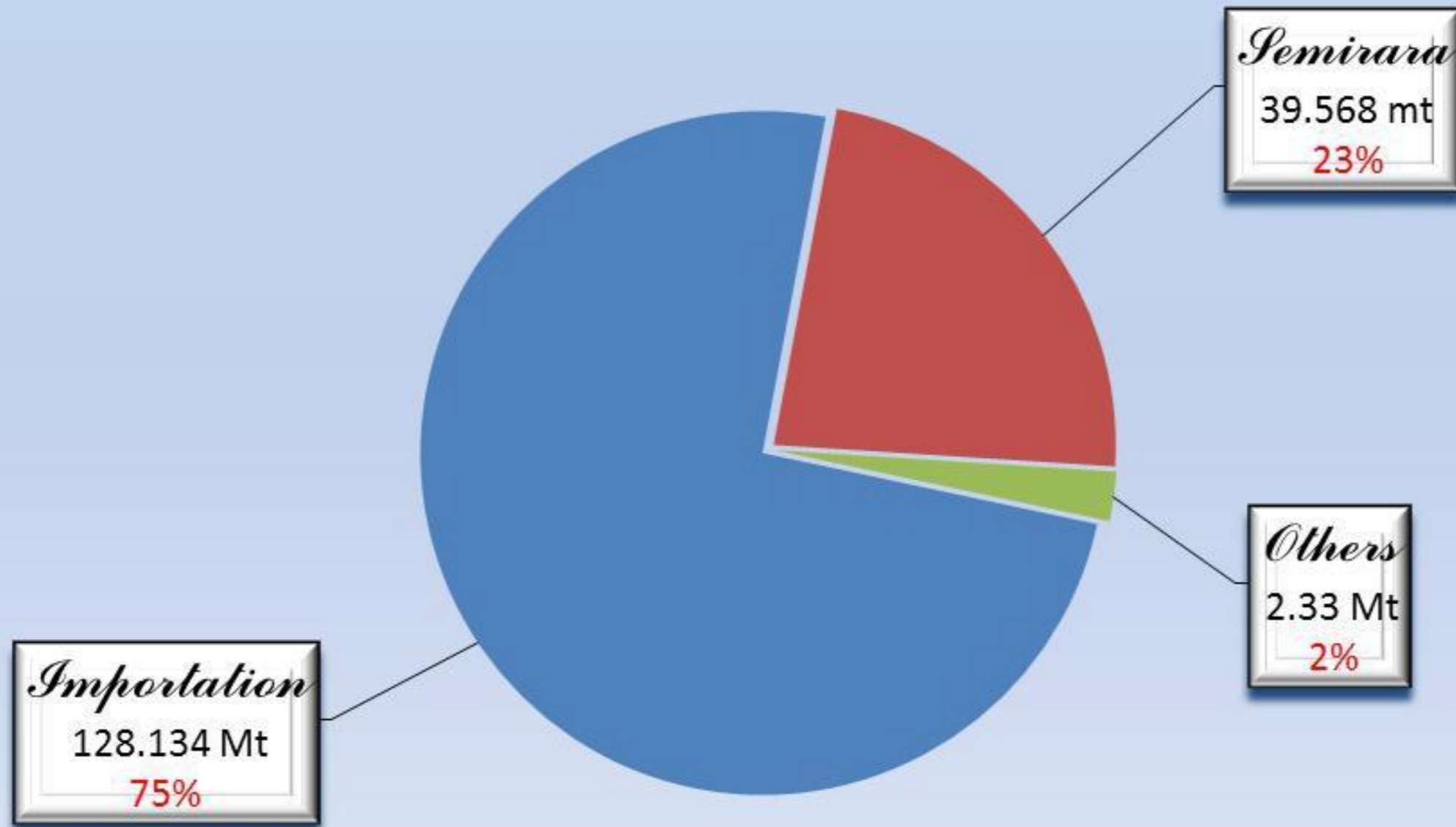
# EXPORT COAL SHIPMENT DESTINATION

STARTED YEAR 2007 TO 2014



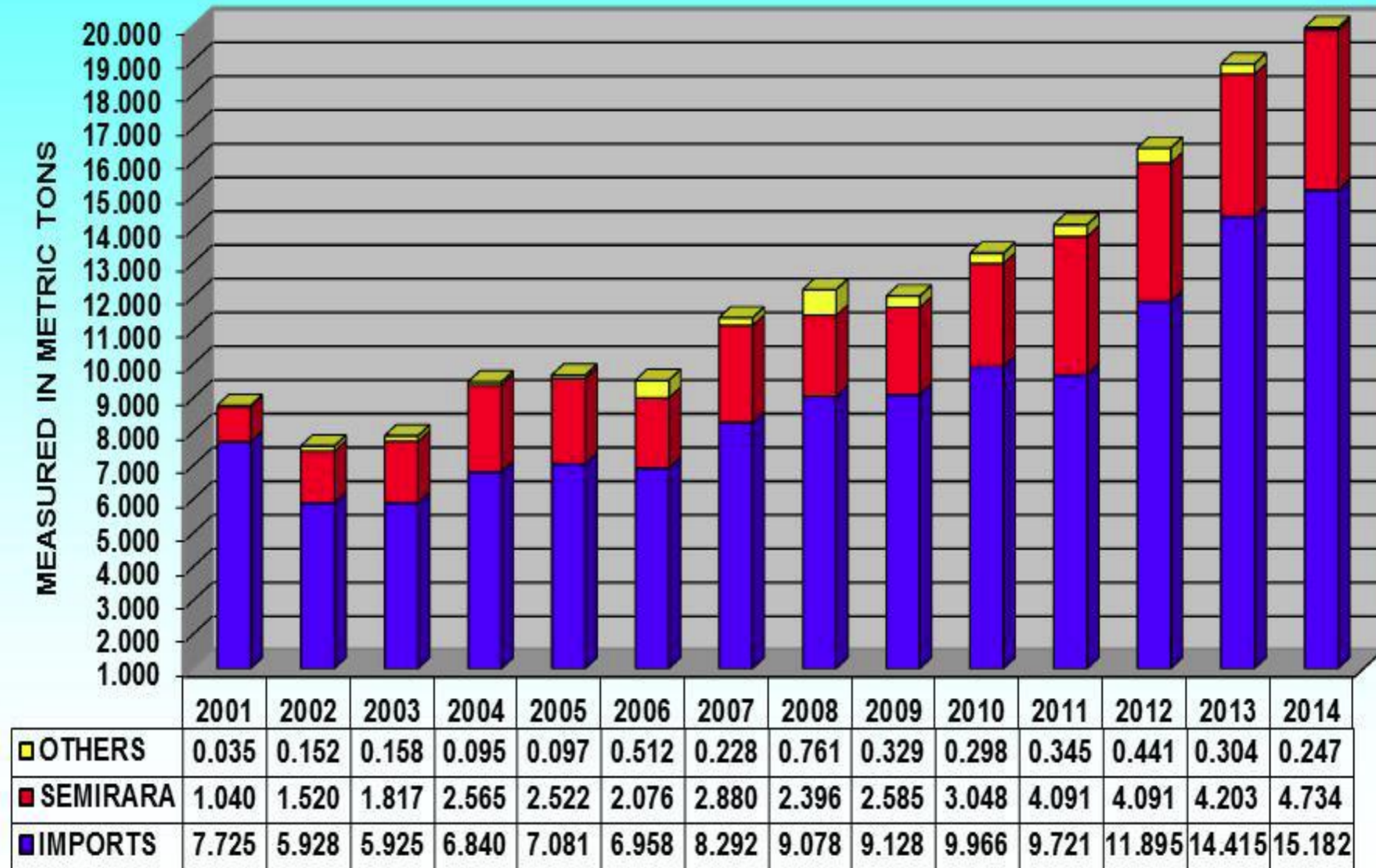
**TOTAL = 22,401,530 MT**

# Philippines Total Coal Consumption ( Year 2001 to 2014 )

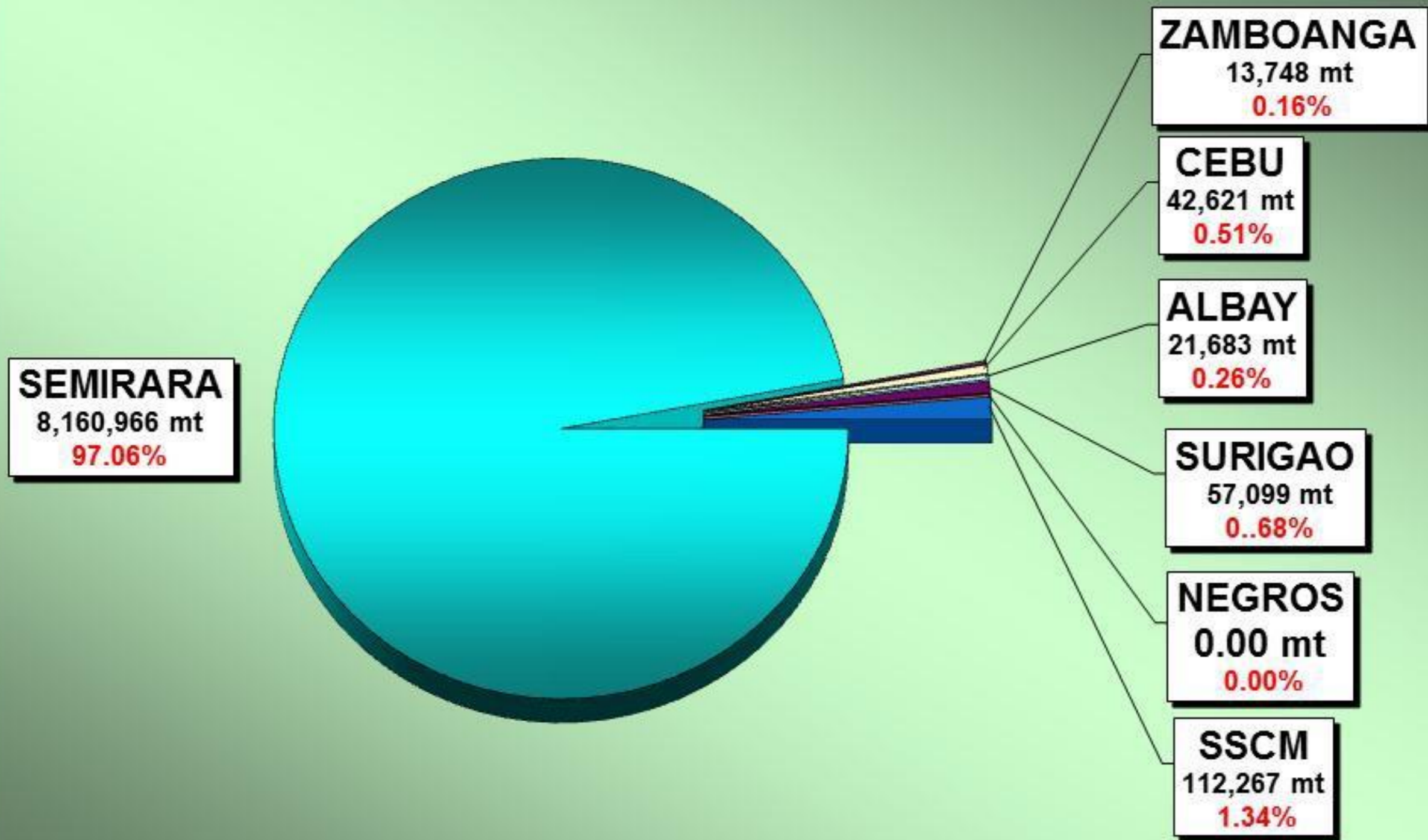


**Total = 171.704 Mil. Mt**

# PHILIPPINES TOTAL COAL CONSUMPTION



# 2014 PHILIPPINE TOTAL COAL PRODUCTION



Total = 8.408 Mil. Mt

*Thank You*