

Milos island:

A sustainable case of mining & tourism

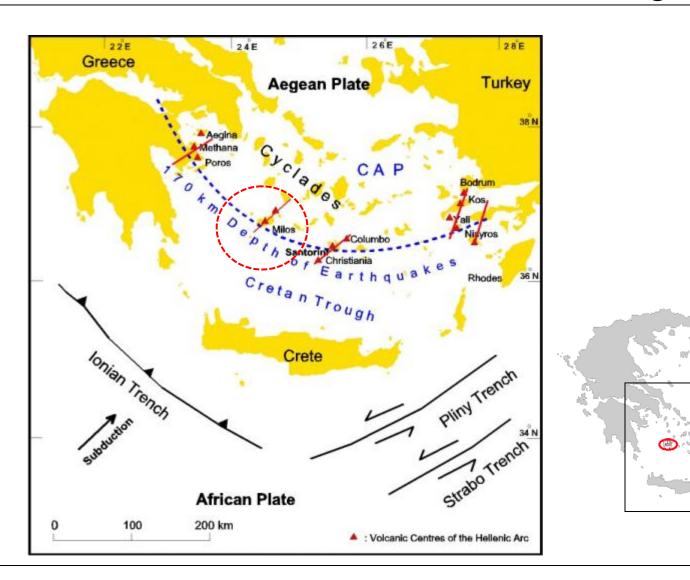
SDIMI 2013

Spyros TZINTZOS S&B Industrial Minerals S.A.

www.sandb.com

S&B Industrial Minerals

Milos: a volcanic island in the Aegean

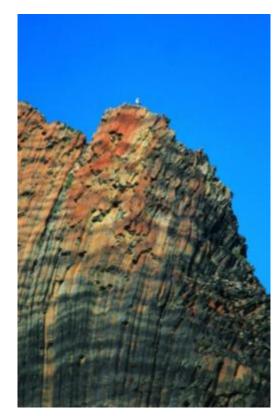


Unique landscape due to nature creations



...an open geological museum





a typical fishermen village of Milos



... a unique natural environment too



Pancratium maritimum



Macrovipera Schweizeri

Wealth due to the same volcanic activity: Mining started 5000 BC ...maybe earlier



Obsidian mining, Neolithic ages



Important archaeological monuments

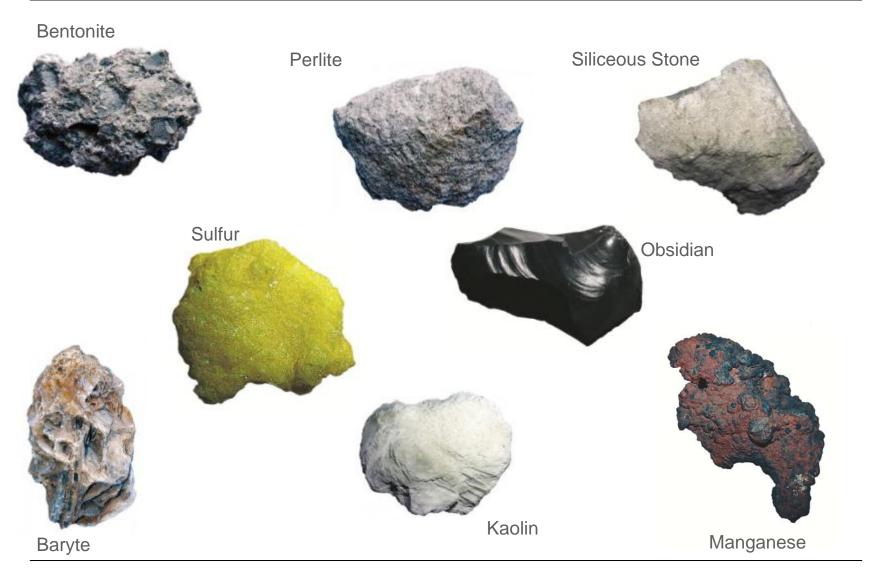
Wealth due to mining in prehistoric era



Phlakopi: A prehistoric settlement on Milos, trading obsidian.

Milos obsidian has been identified in mainland Greece & other SE Mediterranean prehistoric settlements

Traded Rocks & Minerals of Milos



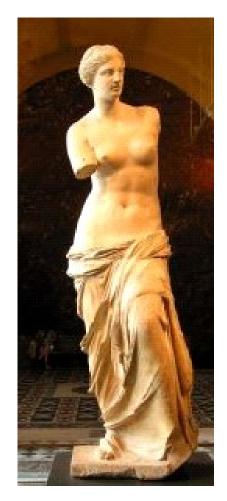
Milos mining – past and present



Ancient wealth ...due to mining

Roman open theater, facilitiating 5.000 spectators





Aphrodite of Milos

Mining is part of recent Milos history too

Kaolin (Melian earth), Millstones, Pozzolana, Manganese ore, Baryte, Perlite,

Bentonite







Milos recent mining history

Sulfur Mines – last year of operations 1960





Manganese Mining & Processing, early 19th c



Important Milos attractions are mining related

boat shelters: tunneling





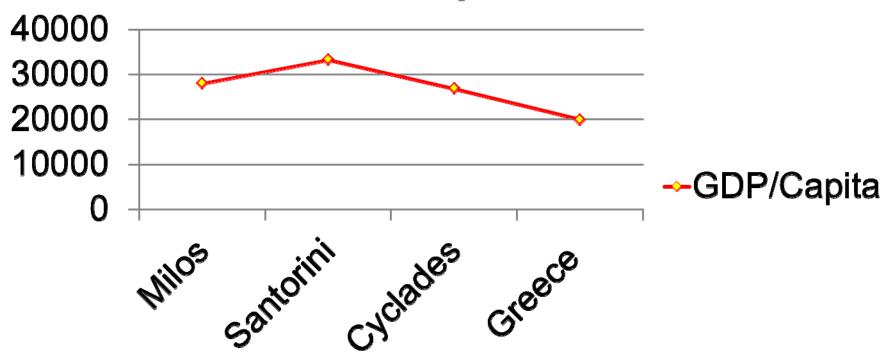
Milos Catacombs

Milos: Some facts

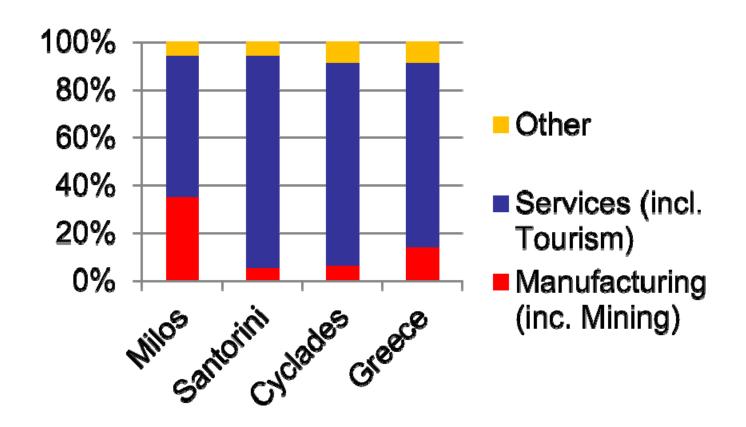
- 5000 habitants
- GDP/capita est. at 28 K euros (Greek ave. 20 K euros), 2011
- → 4 hours from Athens by ferry, 30min by plane
- > 80-100.000 visitors/yr
- Tourism activity peaks in July-August
- Services (incl. tourism & public services) account for 55% of domestic product

GDP per capita comparison

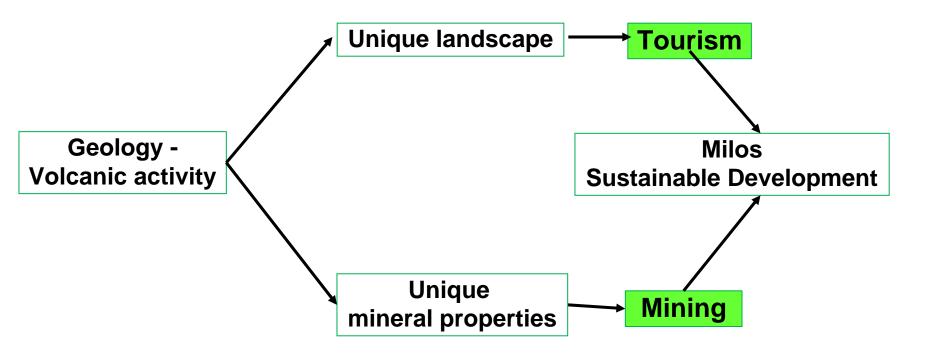
2011 GDP /Capita in Euros



Milos vs. Santorini, Cyclades & Greece GDP



Milos sustainability should be based on two pillars



- There are substantial synergies in developing both pillars together
- Social partners should be committed

Milos additional facts & figures

- No unemployment
- Mining is a year-round economic activity no seasonality
- Currently mining accounts for 30% of Milos GDP
- Mining accounts for 12% of Milos employment (direct)
- 1.5 mio MTs are loaded annually (bentonite, perlite, pozzolana).
 More than 80% exported overseas

Milos Mining today

S&B's is the leading mining company on the island



S&B's facilities in Voudia bay



S&B's bentonite mine in Aggeria

S&B Industrial Minerals on Milos

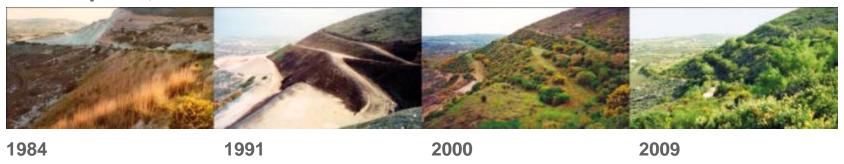
- S&B mining activities started on Milos in 1934. Currently, operates several perlite and bentonite mines and plants (www.sandb.com)
- S&B contributes 1/3 of the GDP of Milos directly and indirectly (IOBE est. 2011)
- S&B employs the 18% of Milos workforce (employees plus exclusive contractors)
- S&B annual Milos CAPEX is the 15% of total investments on the island (public & private)
- Average Social Contribution activities of S&B on Milos (600 K euros/yr, supporting tourism and local communities) are not included on the above mentioned figures.

S&B's started rehabilitation activities decades ago: not enough anymore...

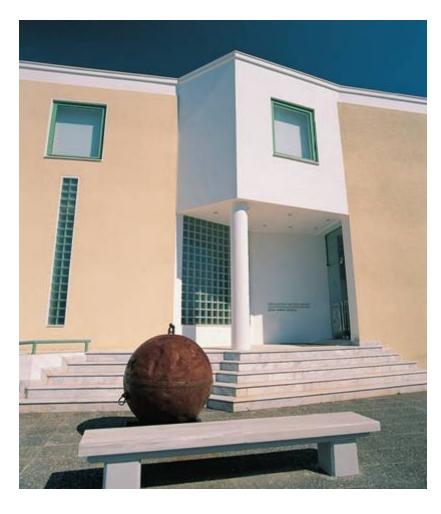
Chivadolimni,



Gerakopetra,

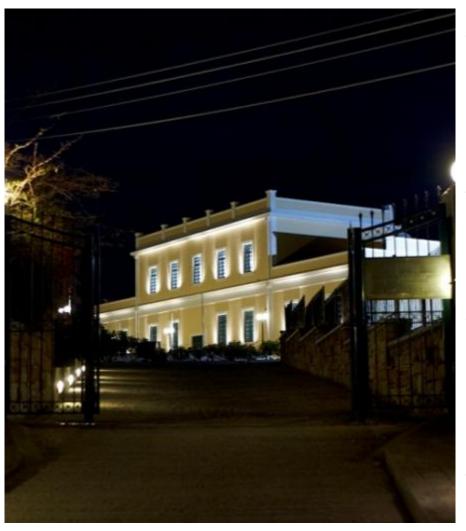


S&B's contribution: Milos Mining Museum



- Inaugurated in 1998. Initiated and financed solely by S&B Industrial Minerals S.A.
- Its mission is to honor and display the mining history & wealth of the island
- 10,000 visitors each year
- Educational programs
- Member of the European Museum Forum

S&B's contribution: Milos Conference Center



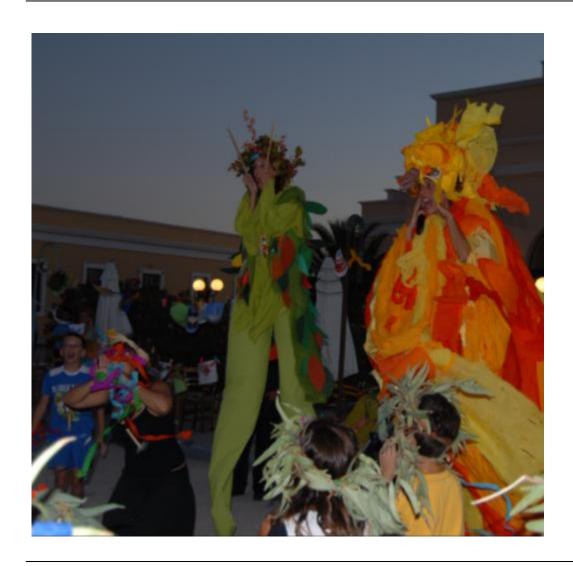
- Milos Conference Center a nonprofit organization financed by S&B major shareholders
- Operating cost is subsidized by S&B Industrial Minerals S.A.
- Over 70,000 visitors in more than 150 events (conferences, or other) since its inauguration in 2000
- A former kaolin processing plant

Milos Initiative: a Milos Municipality and S&B non profit JV



- Aims to promote the island's sustainable development through major CAPEX undertakings
- First major project: urban wastewater treatment facility
- S&B contributed machinery, engineering and construction works (0,8 mio euros)

S&B's contribution: Milos Cultural Festival



S&B is the major contributor of these summer events

S&B facilities. Voudia Bay, Milos



Two pillars co-existence



Pollonia village. A well-known touristic spot on Milos

Distance from dryers: 1000 m

Hotel

Distance from dryers: 210 m

S&B Bentonite dryers

S&B's contribution: Miloterranean

- The project aims to assist Milos visitors' discovery of the island's unique geology, wealth of mining history and present
- A set of maps & guides with detailed routes in a stunning natural environment

Geologists, mining engineers, foresters, cartographers and historians

combine their expertise and insights

It is not a "commercial project" but rather a product to be embraced by the local tourism professionals In order to put Milos Island on the map of unique global destinations, extending the touristic season on the island.



all the secrets of Milos land

Geo-walks - MILOTERRANEAN





The promotional MILOTERRANEAN <u>Video</u>.!!! (2 min)

Thank you! Enjoy it!!