**HELLENIC FEDERATION OF MARBLE INDUSTRIES OF NOTHERN GREECE** 

HELLENIC MARBLE CHALLENGES AND PERSPECTIVES

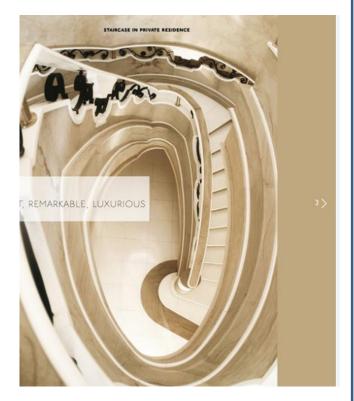
Constantin BAXEVANAKIS Dr. Mechanical Engineer John Moschous S.A

EIT RAW MATERIALS Athens 23–24November 2016

FROM THE ANTIQUITY UP TO NOW THE HELLENIC MARBLE IS IDENTIFIED WITH THE WHITE COLOR ETERNALLY IN FASHION







### FAMOUS ANCIENT HELLENIC TYPES OF MARBLES

#### Parthenon



Pentelikon Marble



Thassos marble

#### The Winged Victory of Samothrace or The Winged Nike



Paros Marble

#### TODAY

## THE HELLENIC WHITE MARBLES COMING FROM NOTHERN GREECE REPRESENTING 90% OF THE HELLENIC MARBLE

**EXPORTS** 



Volakas Marble Additional Names: <u>Branco Volakas...</u> Greece – Marble () Find Suppliers () Post Request



Thassos Marble Additional Names: <u>Thassos White Marb</u> Greece – Marble (Find Suppliers (Find Suppliers)) Post Request Polaris White Marble Additional Names: Polaris Marble... Greece -- Marble Find Suppliers Post Request



Ajax Marble Additional Names: <u>Bianco Ajax...</u> Greece – Marble (•) Find Suppliers (•) Post Request



Ariston Marble Additional Names: Ariston White... Greece – Marble



Golden Spider Marble Additional Names: Drama Gold...



Thassos Waterfall Additional Names: Thassos... Pirgon White Additional Names: Dramas Pirgon White Greece – Marble

161 TRADE NAMES OF HELLENIC WHITE MARBLES ARE RECORDED WORDWIDE Source: stonecontact.com

#### NUMEROUS PROJECTS ARE DONE AROUND THE GLOBE WITH HELLENIC MARBLES



GRAND MOSQUE ABU DHABI FHL KYRIAKIDIS GROUP



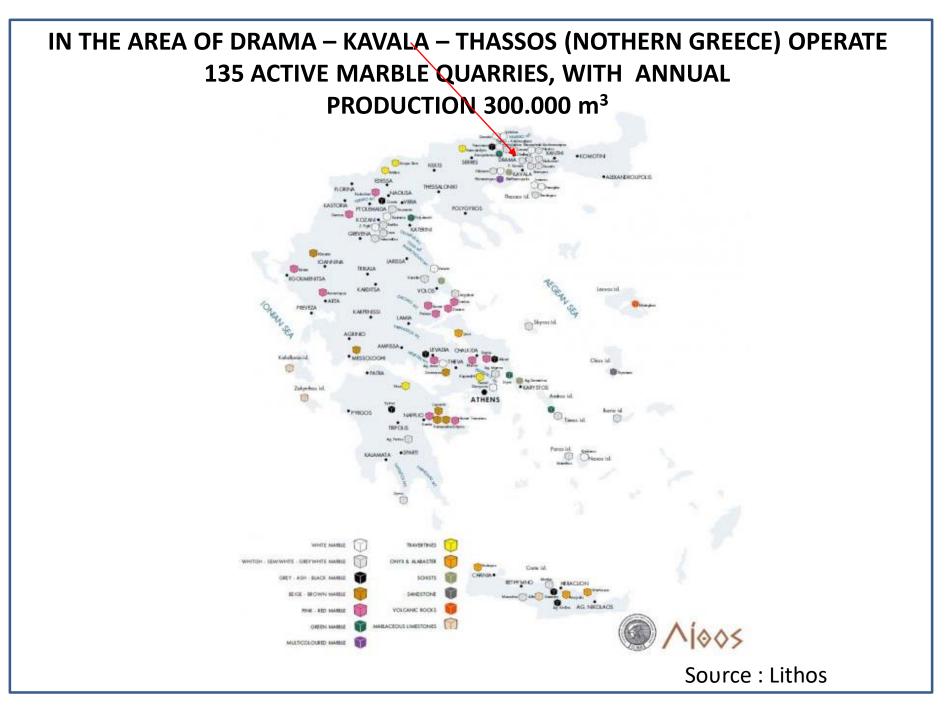
**PAVLIDIS MARBLE & GRANITE** 







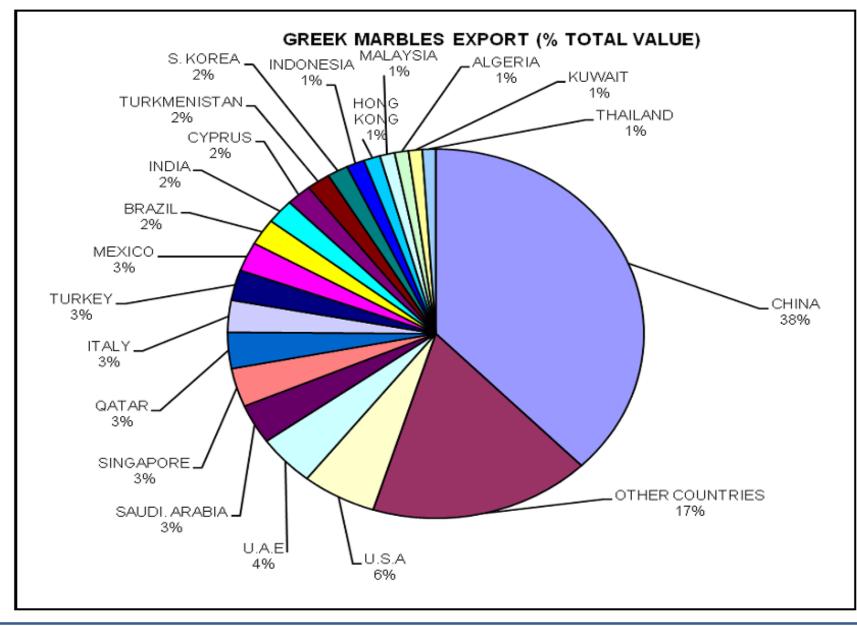
MEKKAH HOLLY MOSQUE OUTDOOR THASSOS SNOWWHITE



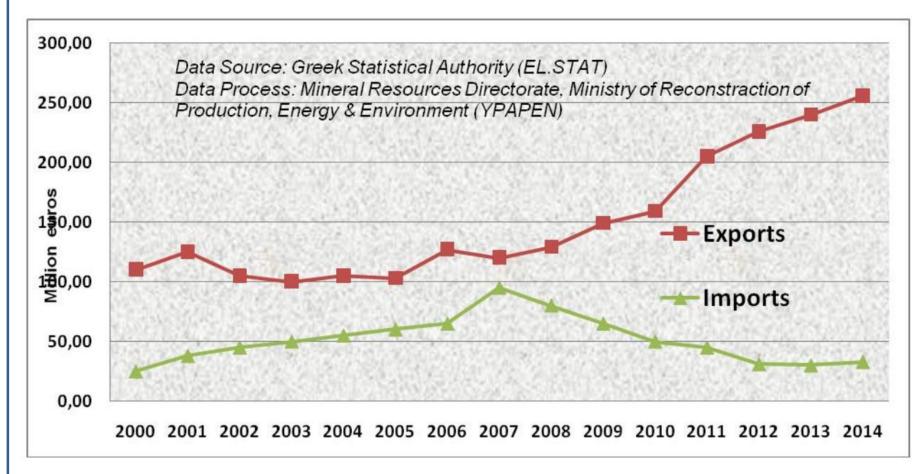
THE HELLENIC MARBLE SECTOR CONSISTS OF VERTICAL INTEGRATED COMPANIES EXTRACTION, PROCESSING AND TRADING 5 companies have a turnover from 20 TO 50 mEuro and more than 20 companies above 3 mEuro



#### EXPORTS OF HELLENIC MARBLES BLOCKS AND FINAL PRODUCTS



# THE HELLENIC MARBLE SECTOR BASED ON EXPORTS STILL KEEP UP WITH A STRONG GROWTH



#### Source Peter TZEFERRIS

#### DESPITE

#### • THE GROWTH OF THE SECTOR

#### •THE ENDLESS RECORDED DEPOSITS OF WHITE MARBLE IN GREECE

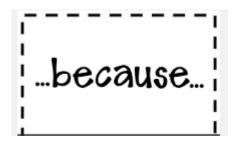
#### •THE KNOW HOW AND THE STRONG FINACIAL POSITION OF THE HELLENIC MARBLE COMPANIES



### **OUR MARKET SHARE WORLDWIDE IS ERODING**

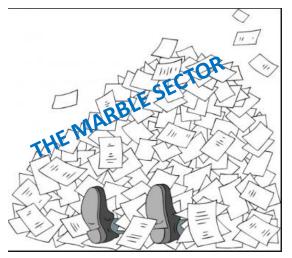
•SINCE OUR QUARRY PROUCTION CANNOT KEEP UP WITH THE DEMAND, A FEW NEW QUARRIES START EVERY YEAR, 5 IN AVERAGE THE LAST 5 YEARS

•NEW WHITE MARBLES PRODUCERS (CHINA AND VIETNAM) ENTER THE MARKET.



• OUR LEGAL FRAME REGULATING QUARRIES CONCESSIONS IS : HEAVY, COMPLEX AND OBSOLETE, IMPEDING THE QUARRYING DEVELOPMENT

•AFTER 18 STATE SERVICES LAYING THEIR POSITIVE OPINIONS AT LEAST TWO TIMES, NUMEROUS STUDIES BEING APPROVED AND FIVE TO SEVEN YEARS OF TIRELESS EFFORTS, A NEW MARBLE QUARRY IS ABOUT TO START.



#### PROPOSAL No 1

THE HELLENIC LEGAL FRAME REGULATING THE CONCESSION, THE EXLPOITATION AND THE ENVIRONMENTAL RESTRICTIONS OF MARBLE QUARRIES SHOULD BE ALIGNED WITH THESE OF OTHER EU COUNTRIES.

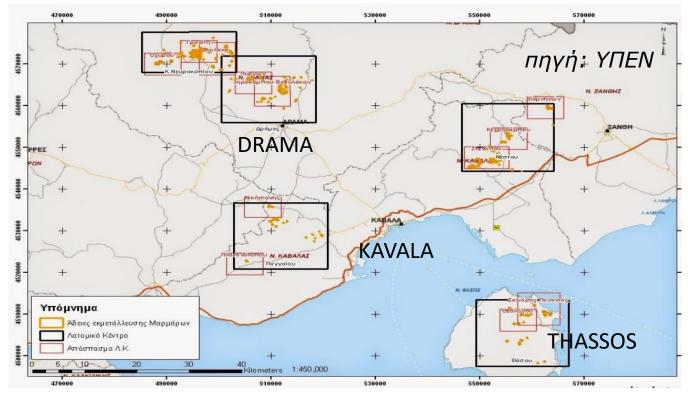
SINCE PRACTISES AND LEGAL FRAMEWORK VARY SIGNIFICANTLY TROUGHOUT EUROPE A COMMON MINING LAW MAY BE CONSIDERED AS A MAJOR PRIORITY.

**EXPORTS MARBLE & GRANITE 2015 EU COUNTRIES** 

- ITALY: 1966 MILLIONS EURO
- SPAIN: 587 MILLIONS EURO
- GREECE: 271 MILLIONS EURO

SOURCE STONE NEWS / EUROSTAT

#### **TURNING QUARRYING WASTE INTO WEALTH**



#### IN THE AREA DRAMA KAVALA THASSOS

4 QUARRING CENTRES HAVE BEEN DEVELOPPED 200 QUARRYING LICENCES, 135 ACTIVE QUARRIES 300.000 M3 ANNUAL PRODUCTION OF MARBLES LOW BLOCK YIELD : 10%

### **TURNING QUARRYING WASTE INTO WEALTH**

#### 3.000.000 M3 DOLOMITE QUARRYING WASTE OR LEFTOVERS ARE PRODUCED PER YEAR.

ACTUALLY:

- CRASHIERS IN EVERY QUARRY TRANSFORM QUARRYING WASTE TO AGGREGATES
- A SMALL PART OF THE AGGREGATES PRODUCTION IS EXPORTED OR USED BY THE READY MORTAR INDUSTRY (MARMODOM FHL Group)
- THE BIGGEST PART OF THE PRODUCTION IS USED FOR PAVING QUARRYING ROADS OR IT IS STOCKPILLED IN THE QUARRIES.



THASSOS: PHILIPPIDIS AGGREGATES PRODUCTION AND EXPROTS

DRAMA: MARMODOM MORTAR PLANT

### TURNING QUARRYING WASTE INTO WEALTH

#### <u>3.000.000 M3 ANNUAL DOLOMITE QUARRYING WASTE ARE STOCKPILLED</u> <u>PER YEAR</u>.

**RESULTING IN:** 

- IMPEDING OPERATIONS IN THE QUARRIES
- DETERIORATING THE ENVIRONEMENT , VISUAL IMPACT
- TURNING LOCAL SOCIETIES AGAINST THE QUARRYING SECTOR



Quarrying center in Thassos island

# TURNING QUARRYING WASTE INTO WEALTH IS A KEY ISSUE FOR THE SUSTAINABILITY OF THE MARBLE SECTOR

# Proposal No 2



A full market research should be carried out in order that the dolomite aggregates be transformed into commercial bi-products.

The marble industries are apt at investing in ANY required technolog

### UNDERGROUND MARBLE QUARRYING

- UNDERGROUND MARBLE QUARRYING IS GAINING GROUND IN THE HELLENIC MARBLE SECTOR DUE TO OPERATIONAL AND ENVIRONMETAL REASONS
- THE METHOD HAS BEEN ALREADY ADOPTED BY 3 COMPANIES DIONYSOS MARBLE, FHL KYRIAKIDIS GROUP, PAVLIDIS IN QUARRIES IN VOLAKAS , GRANITIS AREA IN DRAMA.
- FURTHER COMPANIES ARE PLANNING TO INVEST.





FHL KYRIAKIDIS Group Volakas Quarry Drama

### UNDERGROUND MARBLE QUARRYING

THE HELLENIC COMPANIS HAS DEVELOPED AN INPORTANT KNOW HOW IN :

- DESIGNING
- EXECUTING
- SECURING UNDERGROUND MARBLES QUARRIES





FHL KYRIAKIDIS Group, displacement gauge , quarry Volakas Frama ON LINE MONITORING OF THE OPENING DISPLACEMENT OF THE CRACKS

### **UNDERGROUND MARBLE QUARRYING**

UP TO NOW IN GREECE UNDERGROUND QUARRYING HAS BEEN DEVELOPED IN ONE QUARRY CENTER VOLAKAS AND GRANITIS DRAMA, A SOFT BUT SOLID MARBLE DEPOSIT.

HOW THIS METHOD CAN : - BE APPLIED TO OTHER MORE FRACTURED MARBLE DEPOSITS FOR EXAMPLE IN THASSOS ? - TEAM UP WITH ENVIRONMETAL (NATURA 2000) AND ARCHEOLOGICAL RESTRICTIONS

Proposal No 3

 OPTIMIZING AND EXPAND THE EXISTING TECHCNOLOGY AND NOW-HOW OF UNDERGROUND QUARRYING.

# • A GLORIOUS PAST

- A STRONG PRESENT
- BUT IN ORDER THAT HE CONTEMPLATE THE FUTURE WITH OPTIMISM WE MUST:
  - L MODERNIZE THE LEGAL FRAMEWORK REGULATING QUARRYING ACTIVITIES

CONCLUSIONS: THE HELLENIC MABRLE SECTOR HAS

- 2. TURN OUR QUARRY WASTES INTO WEALTH
  - 8. EXPAND OUR EXISTING QUARRYING TECHNOLOGY AND KNOW HOW

HELLENIC FEDERATION OF MARBLE INDUSTRIES OF NOTHERN GREECE

# ANK YOU FOR YOUR ATTENTION

EIT RAW MATERIALS Athens 23–24November 2016