

IMERYS: Industrial minerals. Excellence in specialty materials



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**MINERAL SOLUTIONS
FOR A CHANGING WORLD**



Introduction

- **S&B** (founded in **1934**) had a good reserve basis (Bentonite, Perlite) in Greece and a good technical knowledge of those Industrial Minerals and of certain Applications (**Metallurgy, Construction**)
- **IMERYS** (founded in **1880**) had and is still having a dominant presence and a strong business development in many and diversified applications (**Food & Beverage, Paints, Plastics, Cosmetics, Ceramics, Paper**) drawing on a large variety of modified minerals portfolio (like: Diatomite, Talc, Kaolin, Calcium Carbonate, etc.)
- **IMERYS acquired S&B** two years ago
- After the incorporation of ex-S&B business (Bentonite and Perlite) **IMERYS is building** on those capabilities and aims to create **new solutions** for several markets segments, thus, increasing the role/value of Greek Raw materials in the global industry



IMERYS key figures 2015



€4.1Bn
Revenue



€538M
Current operating income



13.2%
Operating margin



16,130
Employees



250
Operating sites



50
Countries



8
R&D Centers



#1 or #2
On most of our markets



€5.1Bn
Market capitalization
54% of capital held by GBL



FTSE4Good



2015 Constituent
MSCI Global
Sustainability Indexes



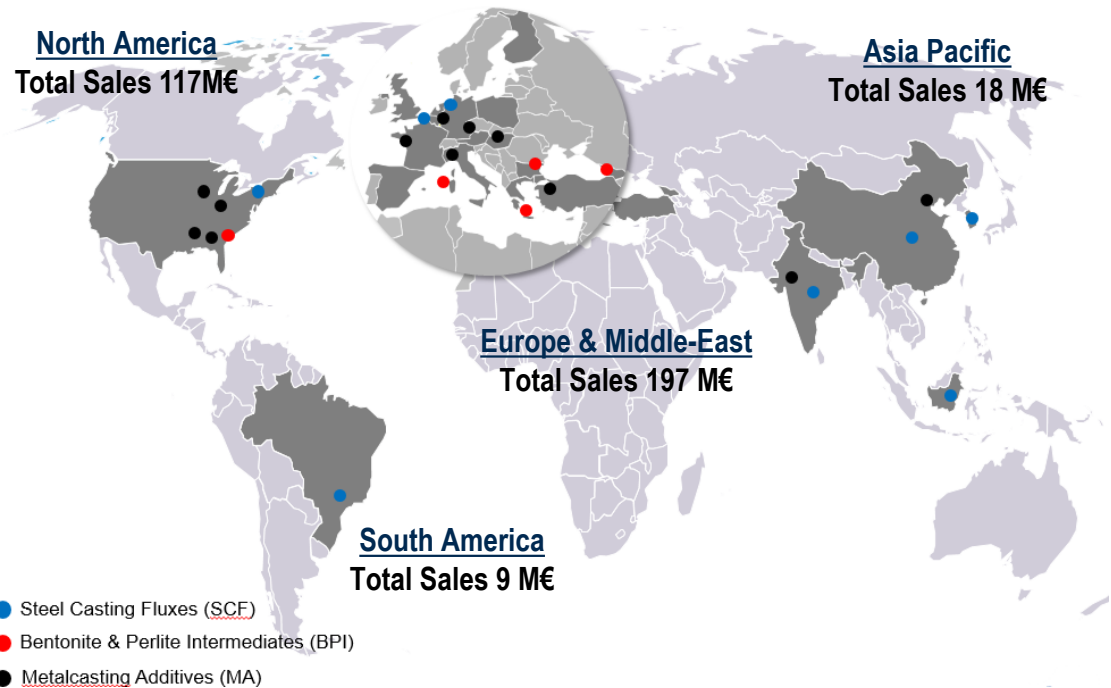
IMERYS

Metallurgy Division (=ex S&B) key figures 2015

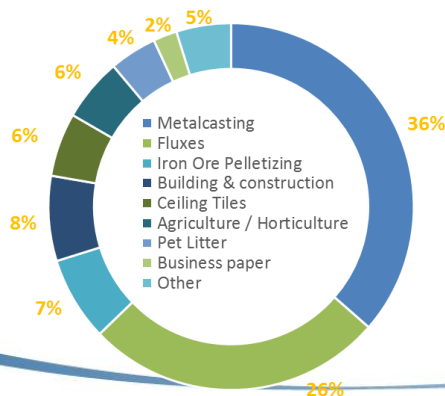
- **Bentonite:** Strong Position in Europe and North America, focusing on **Metalcasting** and **Iron Ore Pelletizing** applications. Present through JVs in China and India
- **Perlite:** Leading position in Europe and North America with efficient logistics and warehouse network, focusing on **Building & Construction** and **Agri/Horticulture**
- **Steel casting Fluxes:** Leading position with a global footprint. Stollberg Samil JV managing 4 plants in Korea, China and Indonesia

Metallurgy Division: 2015 financial and operational information

Revenue 2015	€ 341m
EBITDA	€ 65m
COI	€ 47m
Number of customers	2,000
Industrial facilities	35
Number of products	2,000

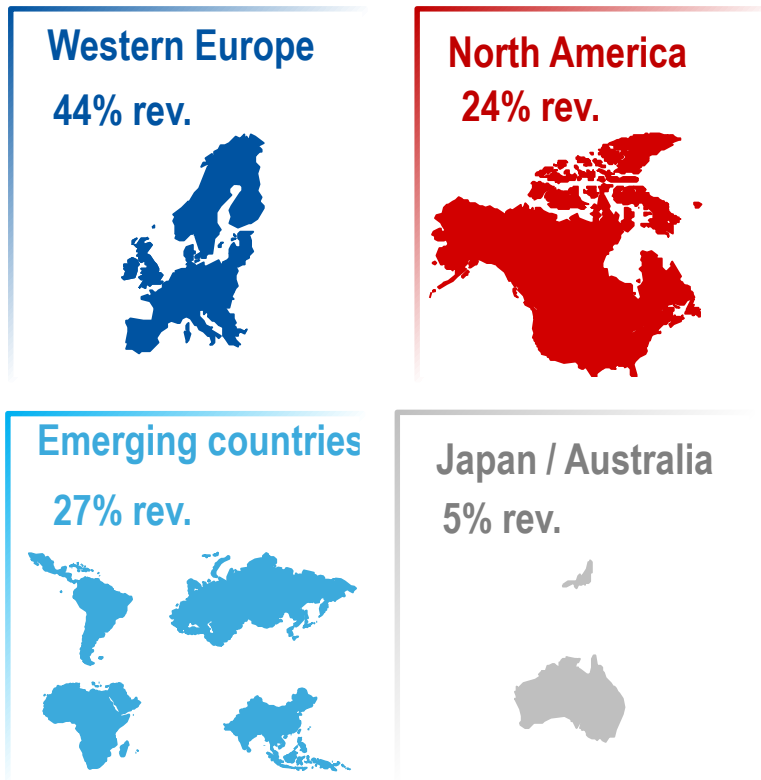


Applications

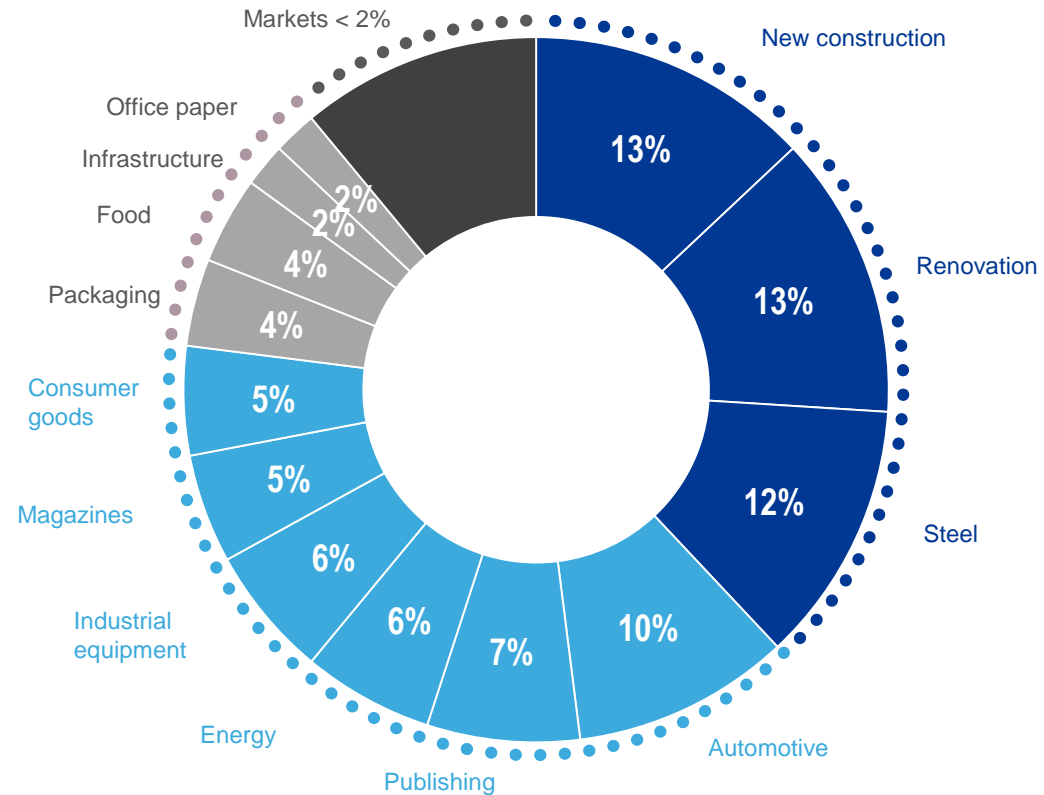


IMERYS presence is diversified in many markets and regions

Revenue by geographic destination in 2015



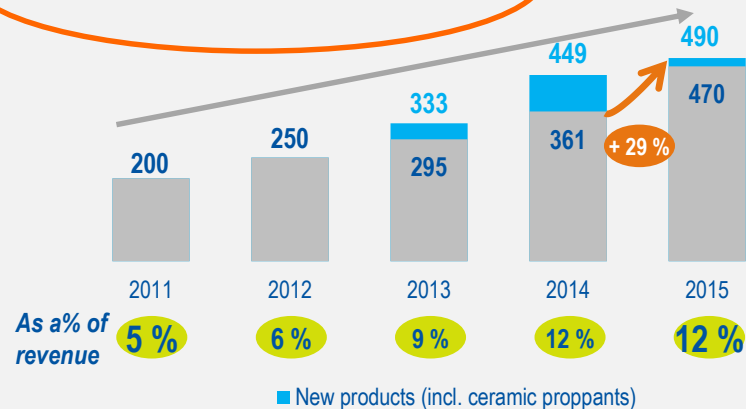
Revenue by market in 2015



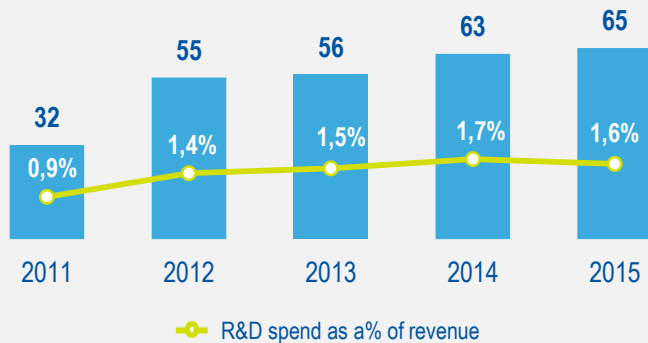
The world leader in **mineral-based specialties** for consumer goods, industrial equipment and construction, with presence in **50** countries

IMERYS growth is fueled by R&D and Innovation efforts...

Revenue from New Products (M€)



Annual R&D spend¹ (M€)



Examples of successful new products



Lighter auto parts

- ◆ Talc solutions for stronger and lighter plastic parts as a substitute for steel parts
- ◆ Formulations for investment casting



New energies

- ◆ Graphite for Li-ion batteries for electric vehicles
- ◆ Bulk storage



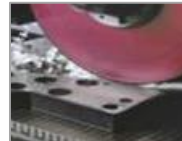
Polymers recycling

- ◆ Mineral formulation for plastic waste recycling
- ◆ Shingles from industrial waste



Mineral specialties for the beauty & pharma

- ◆ Talc for cosmetic powders
- ◆ Perlite for exfoliating body scrub



Energy efficiency

- ◆ New generation abrasives
- ◆ Refractory paint for industrial furnaces



Sustainable agriculture

- ◆ Pesticides / mineral-based fertilizers



A new technology: Fiberlean™

- ◆ First applications for paper production
- ◆ Other applications with high potential

1. Personnel costs, research, process, industrial trials



Global R&D Footprint of IMERYS and Metallurgy Division (ex-S&B)

IMERYS laboratory network consists of:

- **8 main R&D Centers**
- **25 application laboratories** close to the Group's markets
- nearly **400** engineers, scientists and technicians cooperate worldwide to develop innovative solutions for customers...



Metallurgy Division: Examples of new products



New generation lightweight pet litter

- ◆ Close collaboration with client for engineered perlite ore grade plus a tailor-made design of a jumbo perlite expansion plant for a new to the world lightweight pet litter



New solution for highly durable concrete

- ◆ High activity natural pozzolana for high performance concrete with excellent durability & consistency, while maintaining or improving the required compressive strength



Foundry waste stream transformation

- ◆ New and innovative process concept utilizing waste streams from the foundry green sand system and transforming them into RIKO® for optimized & improved mold sand castings



Minimization of disruption of steel plants

- ◆ New feeders for continuous casting market using granular mold flux

... the Metallurgy Division contributes with 3 laboratories:

- **1 R&D Center** in **Greece** for product development, reserves evaluation and technical support
- **2 application laboratories** in **Germany** for product development and technical support in metalcasting application and continuous casting of steel

IMERYS' 4 Divisions- Vast pool of expertise and special solutions

Energy Solutions & Specialties



- Minerals for breathable polymer films
- Ground calcium carbonate (GCC) for paper
- Alumino-silicate monolithic refractories
- Graphite for alkaline batteries
- Conductive additives for Li-Ion batteries
- Large natural graphite flakes

Performance Additives Filtration & Metallurgy



- **Talc** for plastics, **paints**, paper, ceramics, **health & beauty**
- **Mica** for engineered plastics and high performance **coatings**
- Wollastonite for polymers, ceramics, paints & coatings
- **Diatomite**-based products and perlite-based products **for filtration**
- Perlite for construction
- Bentonite for metalcasting
- **Bentonite for filtration & catalysis**
- **Bentonite for paints**
- **Bentonite for health & beauty**

Ceramic Materials



- **Kaolin** for paper & **paints**
- Kaolin for fiberglass
- Raw materials and ceramic bodies for sanitaryware
- Raw materials and ceramic bodies for table ware
- Raw materials for floor tiles
- Clay roof tiles & kiln furniture for roofing tiles

High Resistance Minerals



- Alumino-silicate minerals for refractories
- Fused minerals for abrasives
- Fused zirconia

How IMERYYS' leading position in several markets is expected

The Goal

.... to boost sales of **Milos minerals** to new added value markets

IMERYYS has globally strong **presence** and market share in:

- **Paints & Coatings** through **Talc** and **Kaolin**
- **Food & Beverage** through **Diatomite**
- **Plastics** through **Talc**, **Kaolin** and **Mica**
- **Health & Beauty** through **Talc**, **Kaolin**, and **Mica**
- **Paper** through **Ground & Precipitated calcium carbonate (GCC, PCC)**, **Kaolin** and **Fiberlean™**
- **Batteries** through **Graphite** and **conductive additives**

IMERYYS has developed in-house **Technology** and know-how in order to:

- **Beneficiate** and recover active ingredients from raw materials
- **Modify chemically** the minerals' surface
- **Anchor inorganic/organic molecules** on minerals surface
- **Treat at high and very high temperatures** beneficiated minerals

BD
R&D
M&As

New Opportunities for Milos Minerals

- Bentonite for **Food & Beverage**
- Bentonite for **catalysis** in petro/oleochemicals
- Bentonite for **paints**
- Bentonite for **cosmetics**
- Bentonite for **Pharmaceuticals**
- Bentonite for **mycotoxins absorption**
- Perlite in combination with other compounds for **acoustical tiles**
- Bentonite + other minerals for **Geothermal Grouts**

Conclusions

1. IMERYYS' **Leading position** in various markets/applications where S&B had no or marginal presence will help Bentonite and Perlite to **expand** in these markets by developing **new, added value products** and **engineered solutions**
2. Market penetration will be achieved through **joint efforts** of IMERYYS' and ex-S&B's **R&D** and **Business Development** teams
3. S&B's good **reserve basis** in **Greece** and technical **knowledge** of Bentonite & Perlite will be combined with IMERYYS' **dominant presence** and advanced **technological platforms** in order Milos' minerals to enter new markets: Food & Beverage, Paints, Catalysis, Cosmetics, Pharmaceuticals, Geothermal grouts, etc.
4. The so called "Engineered Mineral solutions" (**=blends of minerals which are chemically and/or thermally treated**) will play a key role in new applications

Thank you for your attention !



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