# **Imerys Minerals Limited (IML)**

# Imerys Global & Local

October 2013

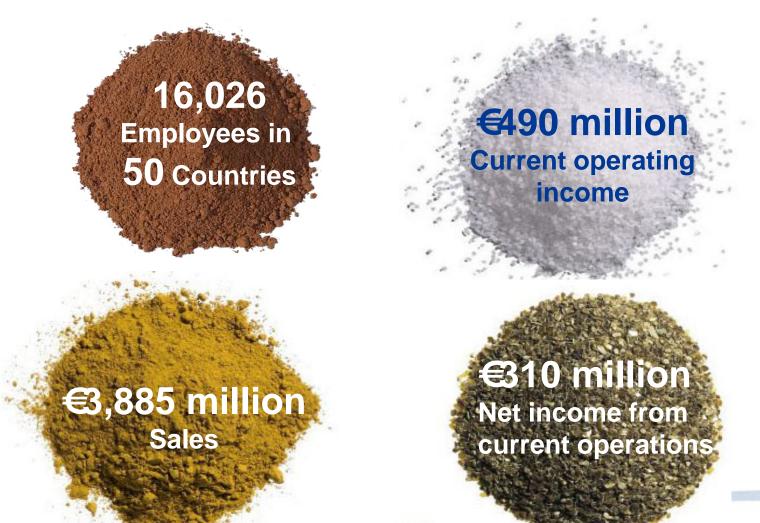




2012

# Imerys – a Global Company

IMERYS mines rare resources and turns them into specialities that improve the products and processes of its customers





#### Presence in 50 countries with more than 250 industrial facilities



8 R&D centers and 20 regional laboratories



# Leadership positions in all business groups

	Market Positions	Main Competitors
Energy Solutions & Specialties (32% of sales*)	<ul> <li>World #1 in alumino-silicate monolithic refractories (Calderys)</li> <li>World #1 in graphite for alkaline batteries and conductive additives for Li-ion batteries</li> <li>World #1 in in lubricants for seamless tube protection</li> <li>World #1 for large natural graphite powders</li> <li>World #1 in minerals for breathable polymer films (GCC)</li> <li>World #2 in ground calcium carbonate (GCC) for paper</li> </ul>	Vesuvius, RHI, Nacional de Grafite, Omya, SMI, Carbo Ceramics
Filtration & Performance Additives (28% of sales*)	<ul> <li>World #1 in kaolin for paper</li> <li>World #1 in talc for plastics, paints, paper, ceramics, health &amp; beauty</li> <li>World #1 in mica and in mica for engineered plastics and high performance coatings</li> <li>World #1 in diatomite and perlite for filtration</li> </ul>	BASF, KaMin, AKW, Thiele, JM Huber, Sibelco, Eagle Picher, CECA, S&B, Grefco, Mondo, IMI Fabi
Ceramic Materials (20% of sales*)	<ul> <li>French #1 in clay roof tiles and for natural slates</li> <li>World #1 in raw materials and ceramic bodies for sanitaryware</li> <li>World #1 in kaolin for fiberglass</li> <li>World #1 in kiln furniture for roofing tiles</li> </ul>	AKW, Sibelco, Unimin, Rio Tinto, Terreal, Monnier, Wienerberger, Saint-Gobain
High Resistance Materials (20% of sales*)	<ul> <li>World #1 in fused silica</li> <li>World #1 in fused minerals for abrasives</li> <li>World #1 in fused zirconia</li> <li>World #1 in alumino-silicate minerals for refractories</li> </ul>	Almatis, Washington Mills, 3M, Saint-Gobain, Foskor, Kaolin AD, Minco

IMERYS

# China Clay - History

# China Clay was first mined in the Jiangxi province of China, from as early as 500BC

- Local potters used the clay to create fine white porcelain that became fashionable in Europe in the 18th Century and is where the widely used term China Clay originates.
- The market demand for fine white porcelain led European Chemists to identify the composition of the white clay as predominantly a mineral, a hydrated aluminosilicate. They called it Kaolin after the Chinese word "Kauling" which means hill or ridge.
- The search for china clay led geologists to the granite moors of Devon and Cornwall. The
  granite contained 3 minerals feldspar, quartz and mica. In South Dartmoor and mid Cornwall
  the white feldspar had decomposed over millions of years, deep underground, at high
  temperatures and pressure to form a primary deposit of China Clay
- It was a Plymouth Chemist, William Cookworthy, who first discovered China Clay deposits in Cornwall in 1746 at Tregonning Hill near Helston and latter in 1748 near St. Stephen in Mid Cornwall.



#### IMERYS 'The Hidden Wealth of Cornwall'

By the end of the 20th Century the contribution of china clay to the economic and social development of Cornwall exceeded that of tin and copper production.

The value of clay sold is put at around £15 billion to date - more than double the value of metals mined in Cornwall.

# **China Clay - Cornwall's Industrial Heritage**

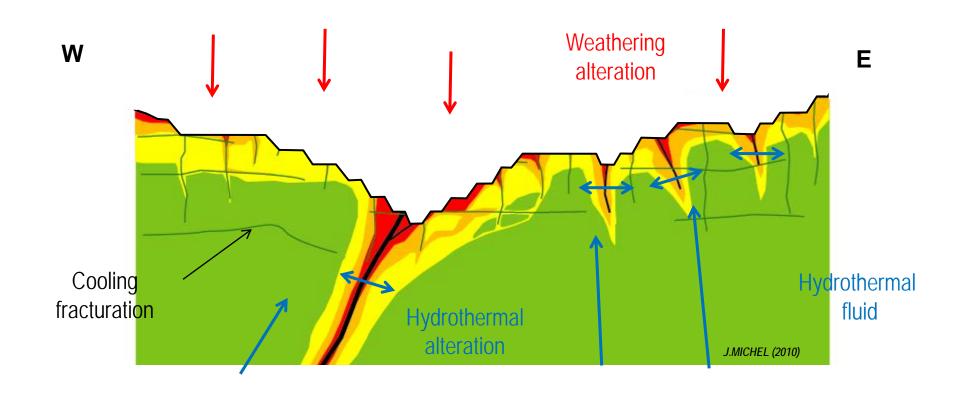
Cornwall is a county known for its historical mining heritage. Unlike the county's tin and copper mines, the extraction of kaolin or white china clay is a thriving industry.







# **Deposit Mineralisation & Mining**

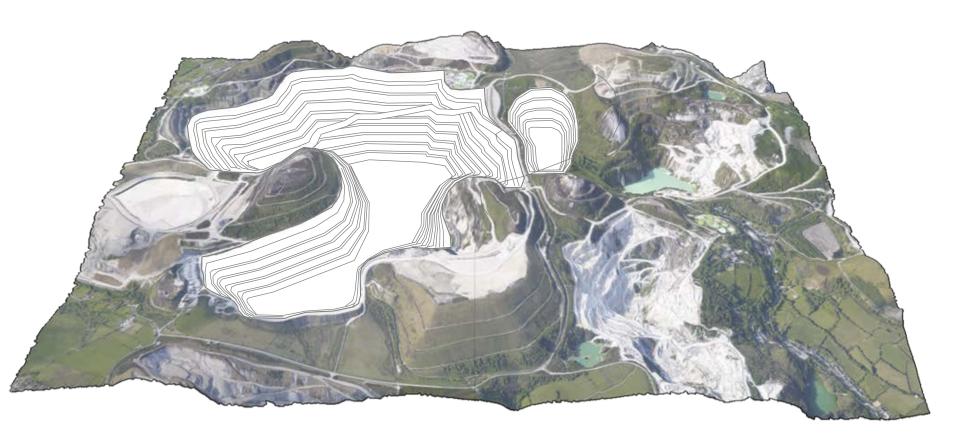




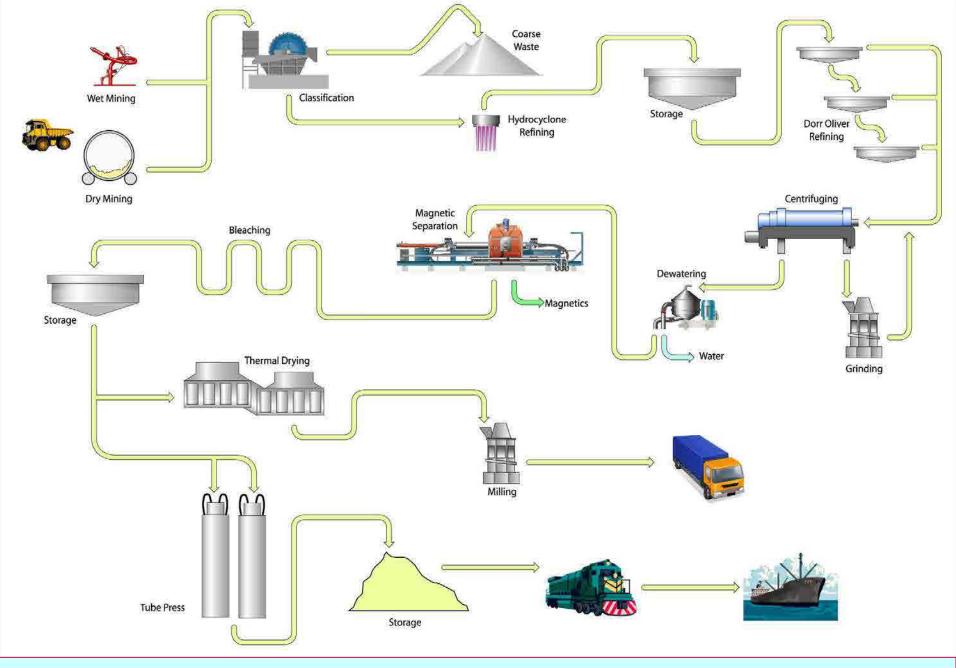
н

### Mine Designs

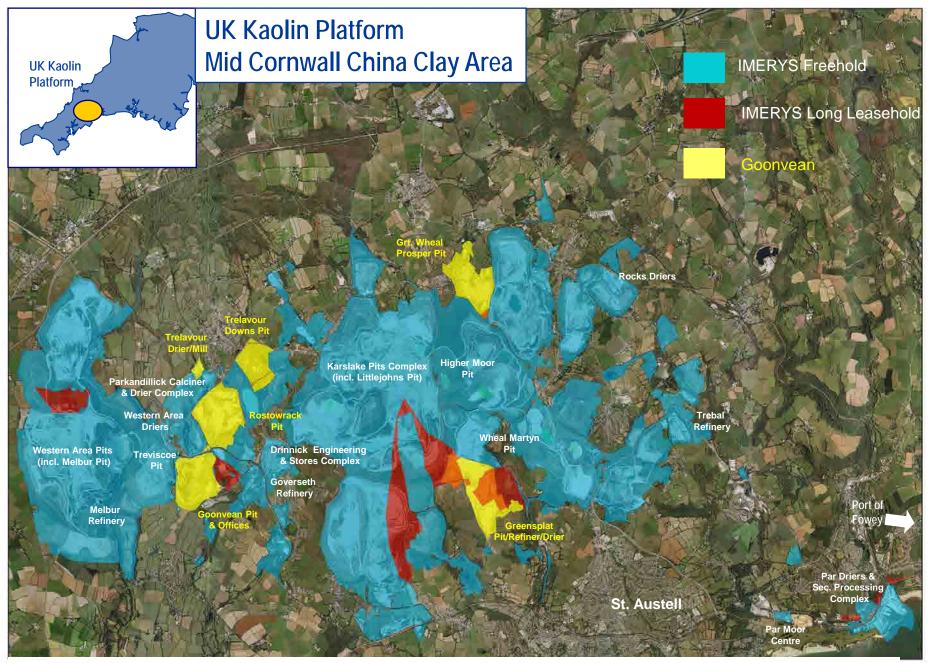
Geologists and Mining Engineers use the latest computer modelling software to analyse the exploration drilling results and along with geotechnical and economic data develop the Mine Designs for the future extraction of the China Clay deposits







Imerys' China Clay Production Route (simplified)



Imerys employs approximately 1000 people in the Mid Cornwall Clay Area and produces approximately 900,000 tonnes of china clay a year The Mid Cornwall China Clay Area covers approximately 25sq miles

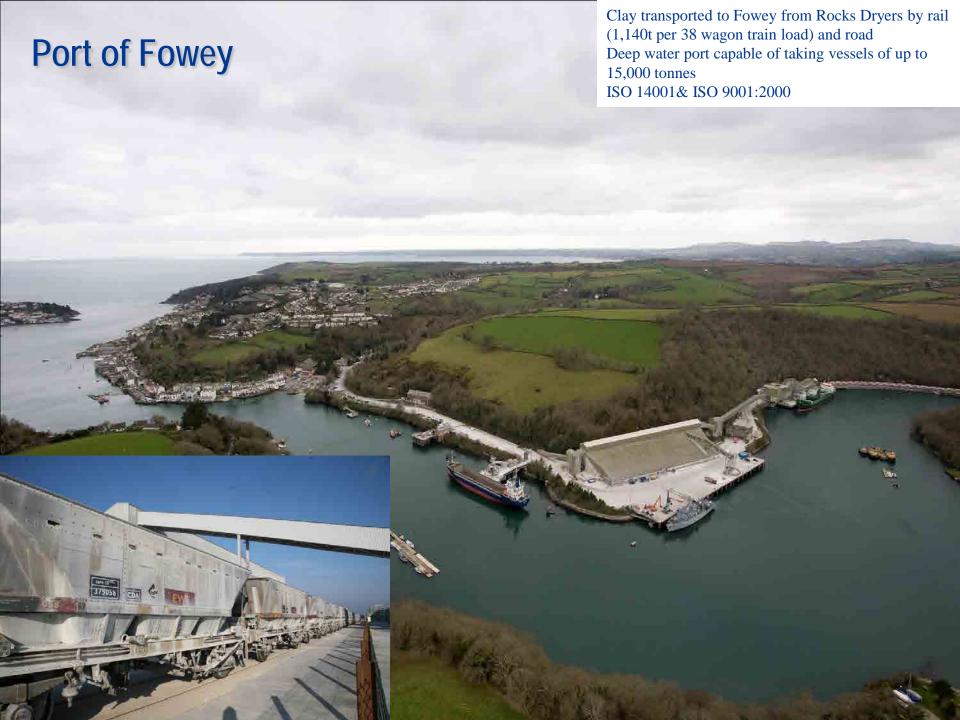






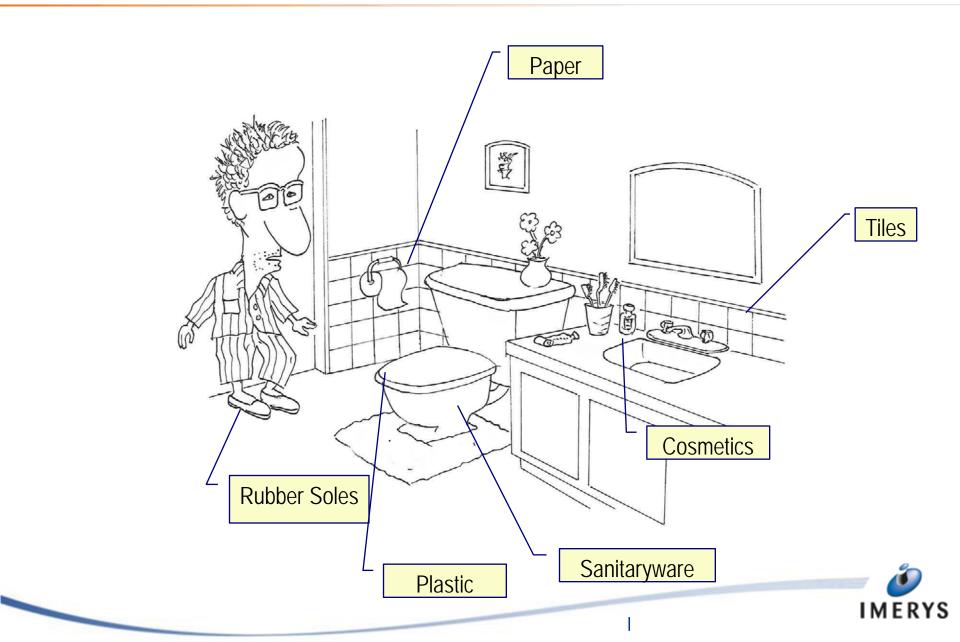


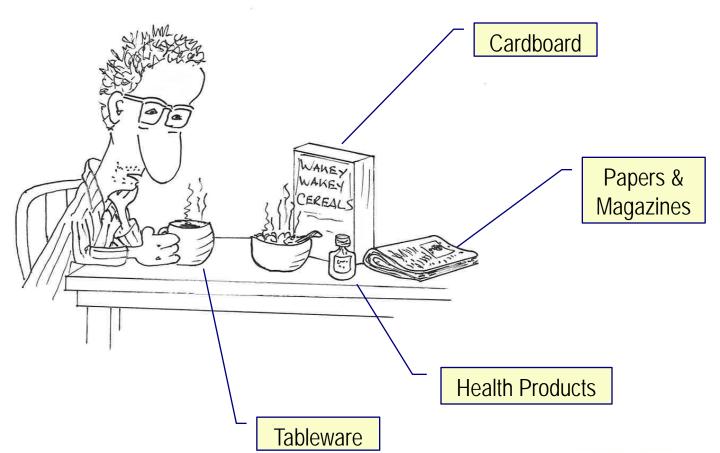




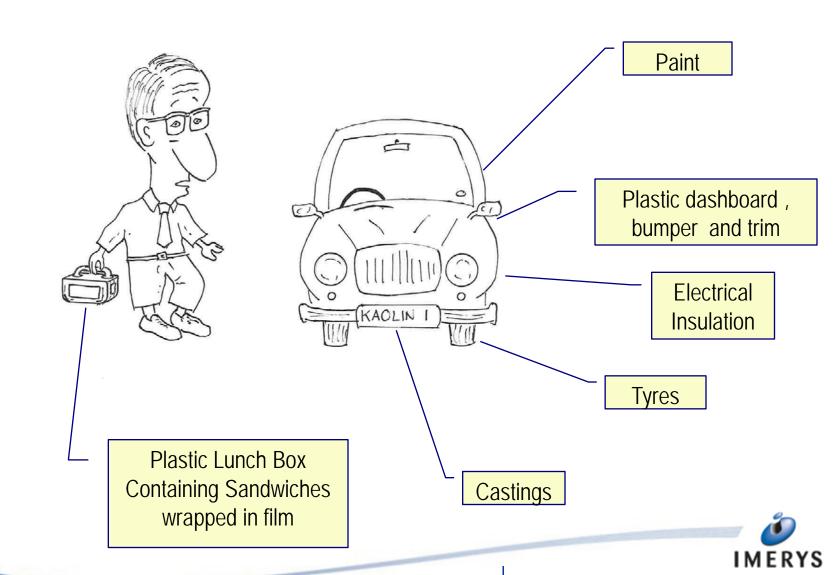


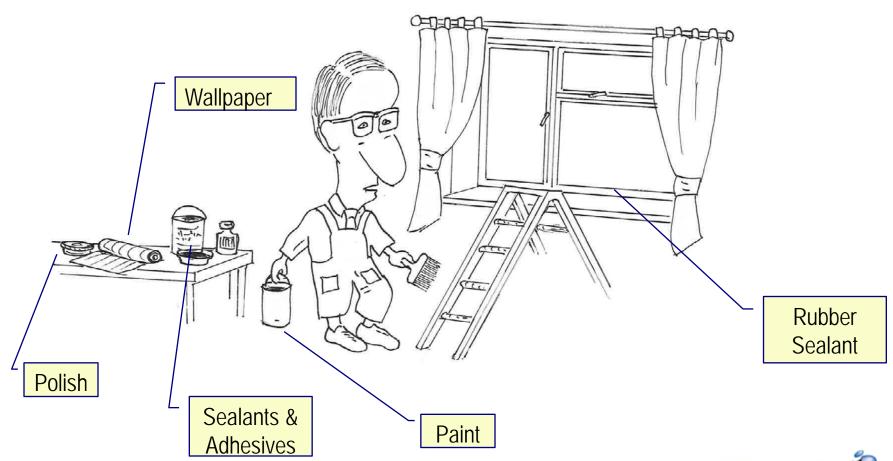
## China Clay is used in a wide range of products including:-



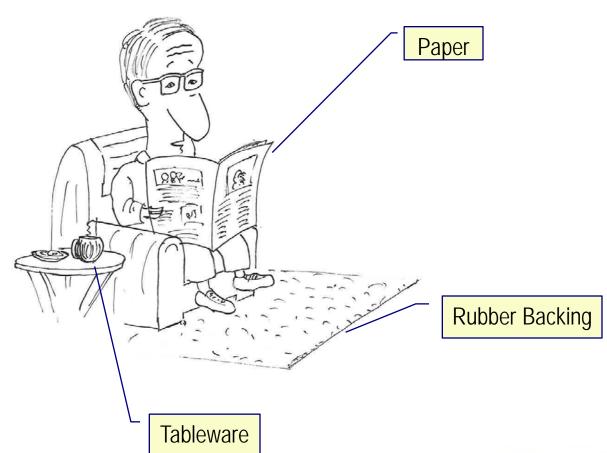














#### Restoration



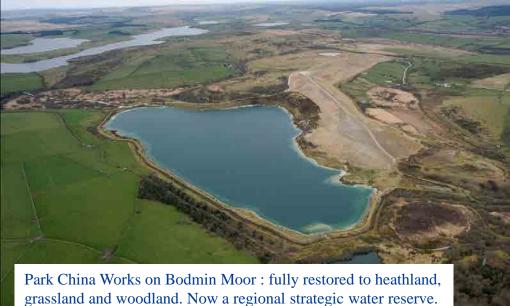
An ongoing programme of restoration and post mining regeneration

Extensive habitat creation: heathland, grassland, woodland, pasture.

40km of permissive public access trails

Over 1,500 hectares of land has in the last 10 years been restored to heathland and woodland.





## **Public (Permissive) Access**



The trails are surfaced to be suitable for walking, cycling, horse-riding and if possible and appropriate for disabled access.

Trails extend to 40km in the Mid Cornwall China Clay area





