Industrial Minerals Resources Reporting

Base for Financial Valuation

Natural Resources Reporting Workshop

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Imerys

Industrial Minerals Resources Reporting Base for Financial Valuation

PRESENTATION OVERVIEW

- A few words about Imerys
  - *History*
  - *Current activities*
- Mineral Reserves and Resources reporting of industrial minerals : practice and structure
- Introduction of the valuation of the mineral asset in line with IFRS 2005
- Current practice in Imerys Group
- Concluding remarks

A few words about Imerys

BRIEF HISTORY

- Imerys has its roots dating back to 1880 with nickel mining in New Caledonia as principal activity
- It was in 60's & 70's that IMETAL as the group was known then diversified into zinc, lead, copper, and uranium
- The interest in industrial minerals started in mid to late 80's with the first acquisitions in refractory minerals, clays, kaolin and calcium carbonate and the start of divestiture of metals mining assets
- In 1999 IMETAL purchased ECC and changed its name to Imerys in 2000 to better reflect its principal interest and break with metals
- Since then Imerys has grown mainly by acquisition to become the leader specialising in industrial minerals as a diversified and decentralised Group

A few words about Imerys - structure

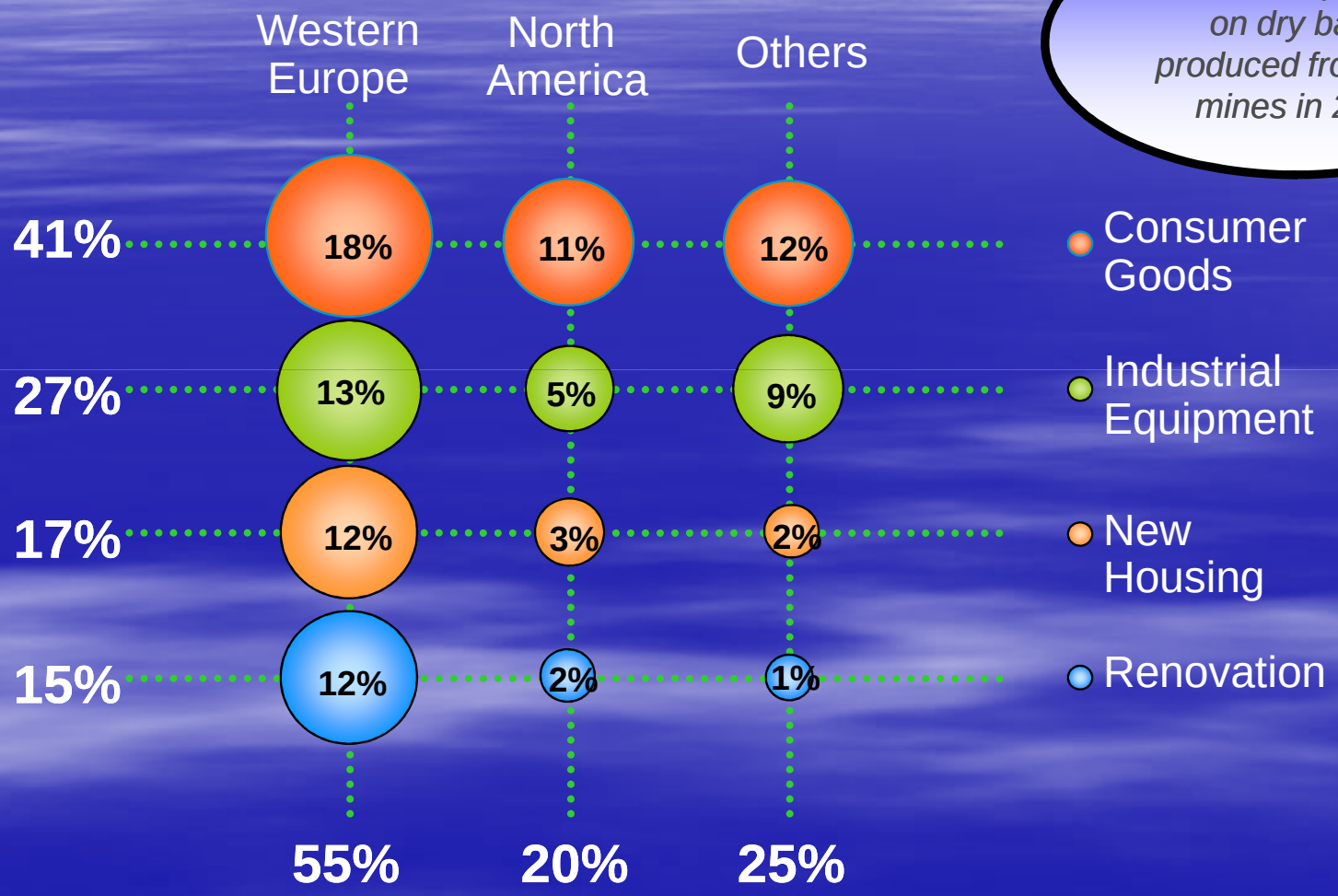
- Sales € 3.449M
- Net current income € 267M
- Operating Margin 11.7%
- Return on capital employed 12%

CURRENT ACTIVITIES at end 2008

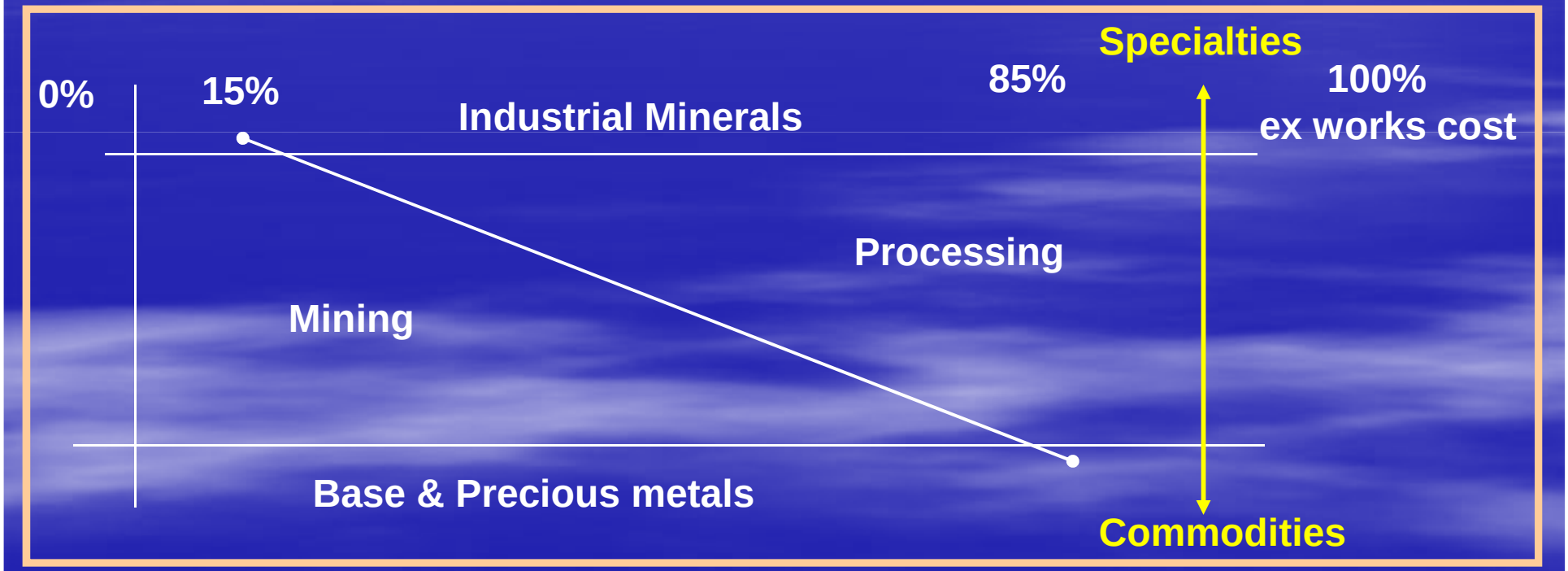
- Quoted on Euronext Paris as part of the SBF 120 index
- 17 000 employees in 47 countries (260 sites)
- Mining activities in 26 countries on 112 sites
- 33 Competent Persons
- Approx 100 geologists and mining engineers

A few words about Imerys - markets

15Mt final product on dry basis produced from own mines in 2008



A few words about Imerys - positioning



Industrial Minerals – special reporting category

- Mineral Reserves & Resources Reporting introduced in 2002
- Basis of reporting is ‘The Reporting Code’ October 2001
- Introduced as part of the Group budget system with fully traceable documentation to geological source documents
- Reporting basis is exclusive with N-1 included
- Reporting is conform to the special conditions ie.
  ‘Reporting of industrial minerals, stone and aggregates’
- Basis of public reporting is contained kilo metric tons on dry basis to simplify reporting and to safeguard sensitive information regarding yields, qualities and market applications
- All conversion factors from in situ data to final product part of report

Industrial Minerals – special reporting category

- Mineral Reserves and Resources published annually in the Group annual report summarised by product group and continent using footnotes to explain any significant movements that require special comment

- Report includes
  - A statement on risks and uncertainties inherently associated with resource evaluation, markets and other parameters, evolution of estimates due to ongoing geological work which could have either a positive or negative impact
  - A statement indicating that there are no known factors that could materially adversely affect the estimates

MINERAL RESERVE ESTIMATES AS ON 12/31/2008 vs. 12/31/2007

		2008			2007		
Products	*Region*	Proven *(Kt)*	Probable *(Kt)*	Total *(Kt)*	Proven *(Kt)*	Probable *(Kt)*	Total *(Kt)*
Ball Clays	Europe (& Africa)	15,323	4,446	19,769	15,949	4,672	20,621
	North America	5,428	740	6,168	5,374	740	6,114
	Asia	1,174	0	1,174	998	0	998
	Total	**21,925**	**5,186**	**27,112**	**22,321**	**5,412**	**27,733**
Carbonates	Europe	10,237	8,928	19,165	4,136	9,460	13,596
(Marble, Chalk, Dolomie,Limestone)	North America	182,497	45,419	227,916	185,082	45,419	230,501
	South America	5,023	800	5,823	8,127	30	8,157
	Asia	2,691	11,955	14,646	2,750	12,152	14,902
	Total	**200,448**	**67,102**	**267,550**	**200,095**	**67,061**	**267,156**
Clays							
(Raw materials for Bricks & Roof tiles)	**Europe**	**67,602**	**22,660**	**90,262**	**67,909**	**22,797**	**90,706**
Feldspar	Europe	25,299	15,897	41,196	24,727	12,736	37,462
(Feldspathic sand & Pegmatite)	North America	1,845	0	1,845	1,958	0	1,958
	Asia	349	120	469	935	200	1,135
	Total	**27,493**	**16,017**	**43,510**	**27,620**	**12,936**	**40,555**
Kaolin	Europe	10,576	21,079	31,655	14,514	30,983	45,497
	North America	28,704	8,502	37,206	32,705	5,995	38,699
	South America	28,353	0	28,353	25,166	0	25,166
	Asia	473	3,435	3,907	474	3,474	3,949
	Total	**68,105**	**33,016**	**101,121**	**72,859**	**40,452**	**113,310**
Minerals for Filtration	Europe	534	364	898	266	568	834
(Diatomite & Perlite)	North America	7,286	5,271	12,557	4,901	3,940	8,841
	South America	0	1,376	1,376	0	1,393	1,393
	Asia	29	138	167	53	148	201
	Total	**7,849**	**7,149**	**14,998**	**5,220**	**6,049**	**11,270**
Minerals for Refractories	Europe (& Africa)	3,432	3,364	6,796	3,783	2,292	6,075
(Andalusite, Quartzite, Bauxite, Bauxitic kaolin,	North America	5,562	0	5,562	5,713	0	5,713
Flint clays, Refractory kaolin)	South America	0	0	0	0	0	0
	Asia	0	378	378	0	397	397
	Total	**8,994**	**3,742**	**12,736**	**9,496**	**2,689**	**12,185**
Other Minerals							
(Bentonite, Graphite, Grès de Thiviers, Quartz,							
Slate, Vermiculite)	**World**	**2,229**	**1,716**	**3,945**	**2,146**	**1,221**	**3,367**

Notes:

- Apart from normal activities including production, exploration drilling, transfers from resources to reserves etc. 2008 changes in perimeter were related to acquisitions in Turkey (Feldspar), Sweden (Quartzite) and divestments and mine closures in United Kingdom (Kaolin) and Brazil (Carbonates).

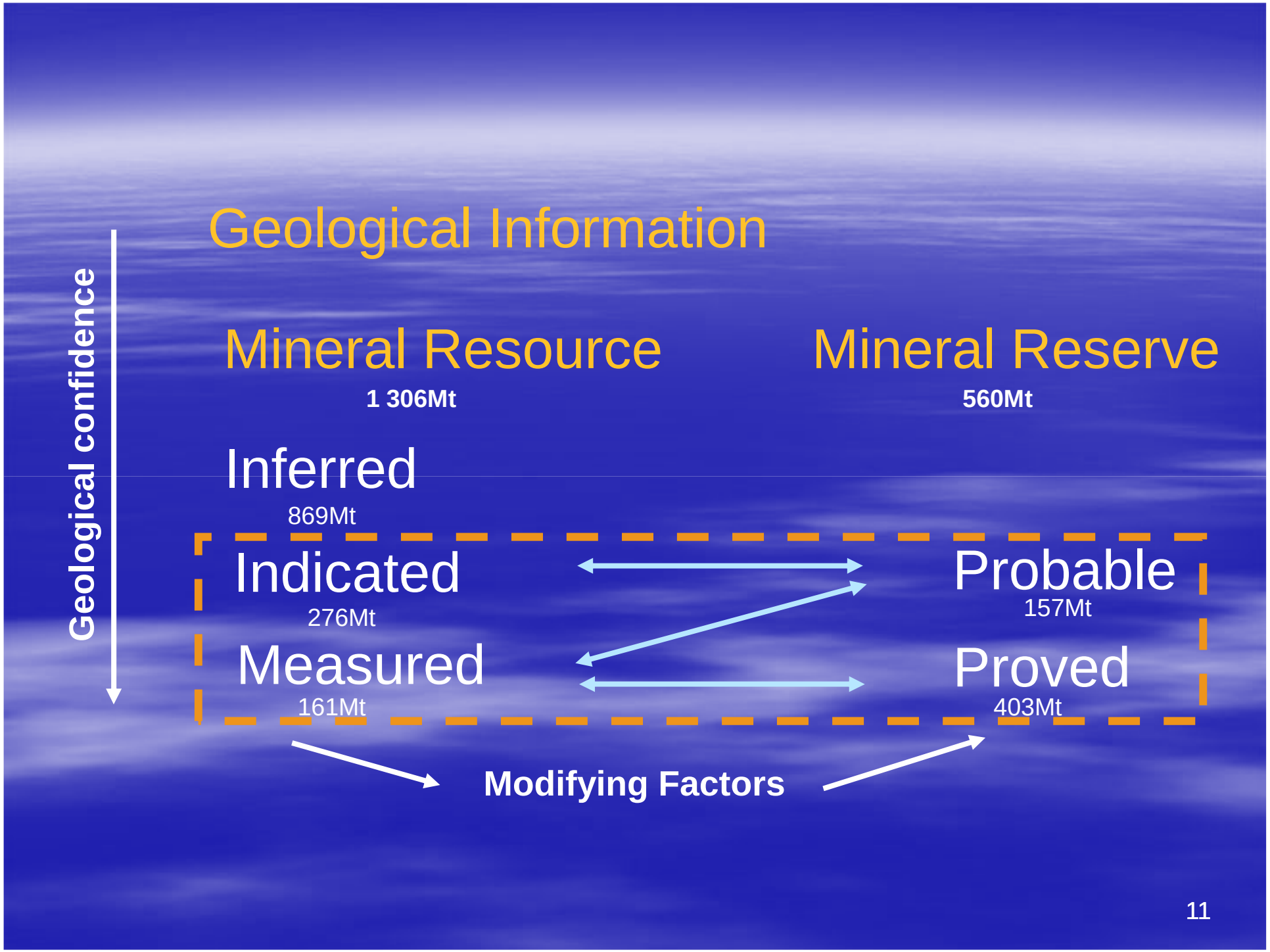
- Estimates are quoted on a contained dry sellable kilo-metric ton equivalent basis. Clay estimates are quoted as dry processable kilo-metric tons.

MINERAL RESOURCE ESTIMATES AS ON 12/31/2008 vs. 12/31/2007

Products	Region	2008 Measured (Kt)	2008 Indicated (Kt)	2008 Inferred (Kt)	2008 Total (Kt)	2007 Measured (Kt)	2007 Indicated (Kt)	2007 Inferred (Kt)	2007 Total (Kt)
Ball Clays	Europe (& Africa)	2,004	3,875	3,450	9,329	1,952	75	2,971	4,998
	North America	10,438	15,779	9,519	35,736	6,751	17,075	9,502	33,328
	Asia	184	0	0	184	187	0	0	187
	Total	**12,626**	**19,654**	**12,969**	**45,249**	**8,890**	**17,150**	**12,473**	**38,513**
Carbonates (Marble, Chalk, Dolomie, Limestone)	Europe	927	4,845	68,800	74,572	3,537	10,205	69,000	82,742
	North America	69,359	101,807	139,224	310,390	69,359	101,807	139,224	310,390
	South America	11,085	10,900	22,983	44,968	11,085	10,900	22,983	44,968
	Asia	0	17,893	28,956	46,849	0	17,893	28,956	46,849
	Total	**81,371**	**135,445**	**259,963**	**476,779**	**83,981**	**140,805**	**260,163**	**484,949**
Clays (Raw materials for Bricks & Roof tiles)	**Europe**	**23,683**	**14,372**	**757**	**38,812**	**11,439**	**15,198**	**757**	**27,394**
Feldspar (Feldspathic sand & Pegmatite)	Europe	2,641	16,923	35,960	55,524	2,641	4,340	24,093	31,074
	North America	2,996	14,280	2,536	19,812	3,102	14,279	2,536	19,918
	Asia	0	565	20	585	0	50	20	70
	Total	**5,637**	**31,768**	**38,516**	**75,921**	**5,743**	**18,669**	**26,649**	**51,062**
Kaolin	Europe	3,047	4,443	51,076	58,567	3,230	7,068	63,806	74,104
	North America	15,022	15,547	35,537	66,105	16,816	12,904	33,431	63,151
	South America	3,493	2,007	8,740	14,240	3,014	122	10,475	13,611
	Asia	0	5,241	3,178	8,419	0	5,241	3,178	8,419
	Total	**21,562**	**27,239**	**98,530**	**147,331**	**23,060**	**25,336**	**110,890**	**159,286**
Minerals for Filtration (Diatomite & Perlite)	Europe	313	3,793	324,157	328,263	291	3,722	324,228	328,241
	North America	1,558	37,070	51,185	89,814	1,923	41,256	50,800	93,980
	South America	0	30	74,402	74,432	0	30	75,702	75,732
	Asia	0	0	322	322	0	0	322	322
	Total	**1,872**	**40,893**	**450,066**	**492,831**	**2,214**	**45,008**	**451,052**	**498,275**
Minerals for Refractories (Andalusite, Quartzite, Bauxite, Bauxitic kaolin, Flint clays, Refractory kaolin)	Europe	1,633	1,676	5,579	8,888	1,632	1,187	5,579	8,398
	North America	11,498	0	0	11,498	11,883	0	0	11,883
	South America	0	1,539	0	1,539	0	1,539	0	1,539
	Asia	0	980	2,072	3,052	0	980	2,072	3,052
	Total	**13,131**	**4,195**	**7,651**	**24,977**	**13,515**	**3,706**	**7,651**	**24,872**
Other Minerals (Bentonite, Graphite, Grès de Thiviers, Quartz, Slate, Vermiculite)	**World**	**1,260**	**2,143**	**887**	**4,290**	**1,957**	**2,389**	**1,162**	**5,508**

Notes:

- *Apart from normal activities including transfers to reserves, exploration drilling,etc., 2008 changes in perimeter were related to acquisitions in Ukraine (Ball Clays), in USA (Ball Clays), in France (Red Clays), in Turkey (Feldspar), by mine closure in United Kingdom (Kaolin), and a termination of lease in Peru (Diatomaceous Earth) due to town encroachment.*
- *Estimates are quoted on a contained dry sellable kilo-metric ton equivalent basis. Clay estimates are quoted as dry processable kilo-metric tons.*


Geological Information
Geological confidence
Mineral Resource
1 306Mt
Mineral Reserve
560Mt
Inferred
869Mt
Indicated
276Mt
Measured
161Mt
Probable
157Mt
Proved
403Mt
Modifying Factors

Valuation – prior to 2004

- Global approach without taking into account the confidence levels related to differences in Reserves & Resource category estimates
- Disparity between valuation by different BU's across the Group
  - *Mineral asset not valued*
  - *Mineral asset over or under valued*
  - *No difference between Reserves and Resources*
  - *No distinction between value of Reserves and value of Resources*
- Unit value / t globally fixed at acquisition date and rarely revised afterwards
- Depletion ratio wrong reflecting incorrect performance reporting of mining activities
- No link between Reserves and Resources reporting and value in asset register
- Little internal or external transparency

Revaluation of Mineral asset – IFRS 2005

- Opportunity to review the measurement of assets under certain conditions at International Financial Reporting Standards 1 = first time adoption in 2005
- Mineral Reserves & Resources = Financial assets based on physical inventory of mineral assets
- Direct link between work of geologists and mining engineers and the results of the Group started in 2004
- Incorporated in the internal and external audit as part of the Group's financial audit system to guarantee compliance with the Group's policies
- Precise and accurate view of its Mineral Reserves & Resources
- Homogeniety and improved comparability between BU's through its management indicators
- Overall improvement in management of Group's mineral asset

Current System – implementation during 2004

- Adopting 'The Reporting Code' as the basis for financial reporting
- Calling on independant experts to define 'Fair Value' based on
  - *Acquisitions, recent market operations, mineral leases*
  - *Discounted calculations of future cash flows*
  - *Discounted calculations of future royalties*
  - *Internal production cost approach*
- Value per ton will be discounted for different categories of resources in order to take into account the related confidence level
  - *Reserves valued at 100% of unit value*
  - *Measured Resources at 50% of unit value*
  - *Indicated Resources at 25% of unit value*
  - *Inferred Resources – not valued*
- Obligatory collaboration between BU and mine managers, geologists, mining engineers and controllers

Current System – accounting principals

- **Annual reconciliation between inventory quantities and book values**
- **Evolution between Reserves and Resources estimates between year N and N-1 (CP responsibility)**
- **New depreciation ratio calculated each year closing based on reconcilliation and used for the following year's income statement**
- **Equation to be solved by controllers :**

$$\text{Unit value / t} = \frac{\text{Closing book value of Reserves \& Resources}}{100\%*\text{Reserves} + 75\%*\text{Measured} + 25\%*\text{Indicated}}$$

Where :

- *Closing book value is value at N-1 less depreciation (production tons*unit value at N-1) plus value of acquisitions and drilling & related costs less value of sessions*
- *Reserves are total Reserves (including transfers from resources, acquisitions, sessions etc.)*
- *Resources are total Resources (net of transfers to reserves and sessions and including acquisitions)*

Current System – accounting principals

- A Yearly depreciation expense calculations have a sound and uniform base
- A Applicable Group wide including all acquisitions
- A Managers now think in terms of Reserves and Resources and no longer globally resulting in better accuracy
- C Effective method to value mineral asset over life of mine taking all movements in technical estimation into account on a year by year basis
- A Specific accounting treatments recognised by controllers based on CP's reports for all particular situations (by-products, co-products exceptional changes ….)
- C Because Industrial Minerals markets are generally aligned with GDP growth there are few cyclic variations permitting a stable valuation of mineral asset

Current System – benefits

- A large part of the added value of Industrial Minerals products is generated during the processing stage permitting the mineral asset to be valued homogenously across the Group
- Book value always has to be justified with regard to inventory quantities compiled by Competent Persons
- Better technical and financial management of mineral assets due to a visible impact of their work
- Improved communication between technical and finance through regular exchanges for consolidation
- Platform to conduct impairement test when there is a noteable misalignment between book and real value of the mineral asset either at a specific site or across sites on a mineral type
- Homogenous vision of mineral asset both from a technical and an accounting point of view across Group
- Improved transparency, materiality ….

Questions ?

IMERYS
TRANSFORM TO PERFORM