

A pioneering company in the field of concrete and aggregates, Lafarge has recently intensified its development in emerging markets. In these countries, the demand for construction materials is driven by demographic development and vast housing and infrastructure needs.

Aggregates & Concrete, a winning strategy

the concept of "emerging" markets first appeared in the 1980s when a number of countries opened up their economies, including the Middle East, China, India, Brazil, Russia, Poland, South Africa and Mexico. Over the past two decades, rapid economic and social development generated substantial needs for the construction of infrastructure and housing. "These markets are characterized by accelerated urban growth and, therefore, by huge requirements for infrastructure," explains Gérard Kuperfarb, Executive Vice-President and Co-President of the Aggregates & Concrete Business of Lafarge. "Housing, schools, bridges, roads, railways, ports and airports... All of these works will continue to drive strong demand for our products for decades to come. These large-scale projects enable us to establish ourselves and can thereafter offer us the opportunity of creating commercial enterprises when the conditions are favorable."

Another approach consists of identifying those markets where a commercial offer for concrete is beginning to develop. "In these emerging markets, it is often public works contractors, for whom it is not the core business, who move into the area of the commercial supply of concrete," points out Didier Riou, Responsible for the Aggregates & Concrete Business •••

The front of the Raffles Hotel in Dubai, United Arab Emirates. A 110-meter-high pyramid structure designed by architects Arif & Bintok and made of Lafarge concretes.

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... for the Southern European, Mediterranean and African regions. "We are well positioned to persuade them to work with us by guaranteeing the supply and the quality."

Advantage for international players

The medium- and long-term prospects for development are considerable. "These markets are looking for players technically and financially capable of opening up and managing quarries and of controlling the medium- and long-distance logistics to enable the supply of the quantities necessary for urban growth," indicates Tom Farrell, Executive Vice-President and Co-President of the Aggregates & Concrete Business of Lafarge.

"In Russia, for example, logistics is an essential part of our business," points out Philippe Mauran, who now works in India after having been in charge of Central Europe. "Moscow is something of an exception because, in the vicinity of the city, there are no deposits of aggregates of sufficient quality to produce concrete suitable for the local climatic conditions. So they have to be brought in from Ukraine or the Urals. Whereas in France, the average distance between the quarry and the building site is 32 kilometers, in Russia, it can be as much as 1,000 kilometers!"

Two other aspects are characteristic of these emerging markets: concern for the environment and production quality. "The governments are trying to reinforce environmental legislation (forbidding the extraction of alluvial sands, rehabilitation of quarries...) and establish demanding standards. It is a competitive advantage for Lafarge, because we apply these standards around the world," continues Tom Farrell. "Concerning the quality of aggregates, the development of ready-to-use concrete and asphalt brings with it new customer demands. Here again, local players do not always possess the techniques and the expertise to satisfy the demand."

In markets where, in spite of the economic outlook, technical expertise is still lacking, Lafarge finds ideal conditions to set up its business. "The criteria to be taken into consideration are numerous," points out Tom Farrell. "First, it is necessary to understand these markets, and very early

RESEARCH ON AGGREGATES

Lafarge is the only construction materials company to undertake, since 2003, extensive research into aggregates. "Thanks to a better understanding of aggregates and of their characteristics – physical and chemical composition –, we are a step ahead with our products and they are increasingly high performance," explains research engineer Philippe Toubeau, Aggregate & Asphalt & Paving Project Manager at the Lafarge Research Center. For example, by playing on granular packing – a process that decreases the volume of porosities – we can now increase the mechanical performances and durability of concrete. Emerging markets? "We are able to rely on our unique system of classification to be able to make a rapid and accurate assessment of any new deposit. It's a decision-making tool for the acquisition phase of quarries and enables us to optimize our formulae for concretes and asphalt. It's a clear competitive advantage." What's more, with a policy of sustainable development, research also focuses on adding value to the materials coming out of the quarries. "The objective is to use all the material extracted and to leave behind no waste." ■

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The construction site of the Free State Stadium, made in Lafarge ready-mix concrete, in Bloemfontein, South Africa.

on. Some of them have structural shortcomings between supply and demand; these are the ones that we seek out as a priority. Through acquisitions or the construction of new sites, we made investments that offer a vast potential. This is an important opportunity for the Group, since emerging markets should represent, over the years to come, a volume of aggregates and of profits equivalent to Western economies."

Continuous acceleration

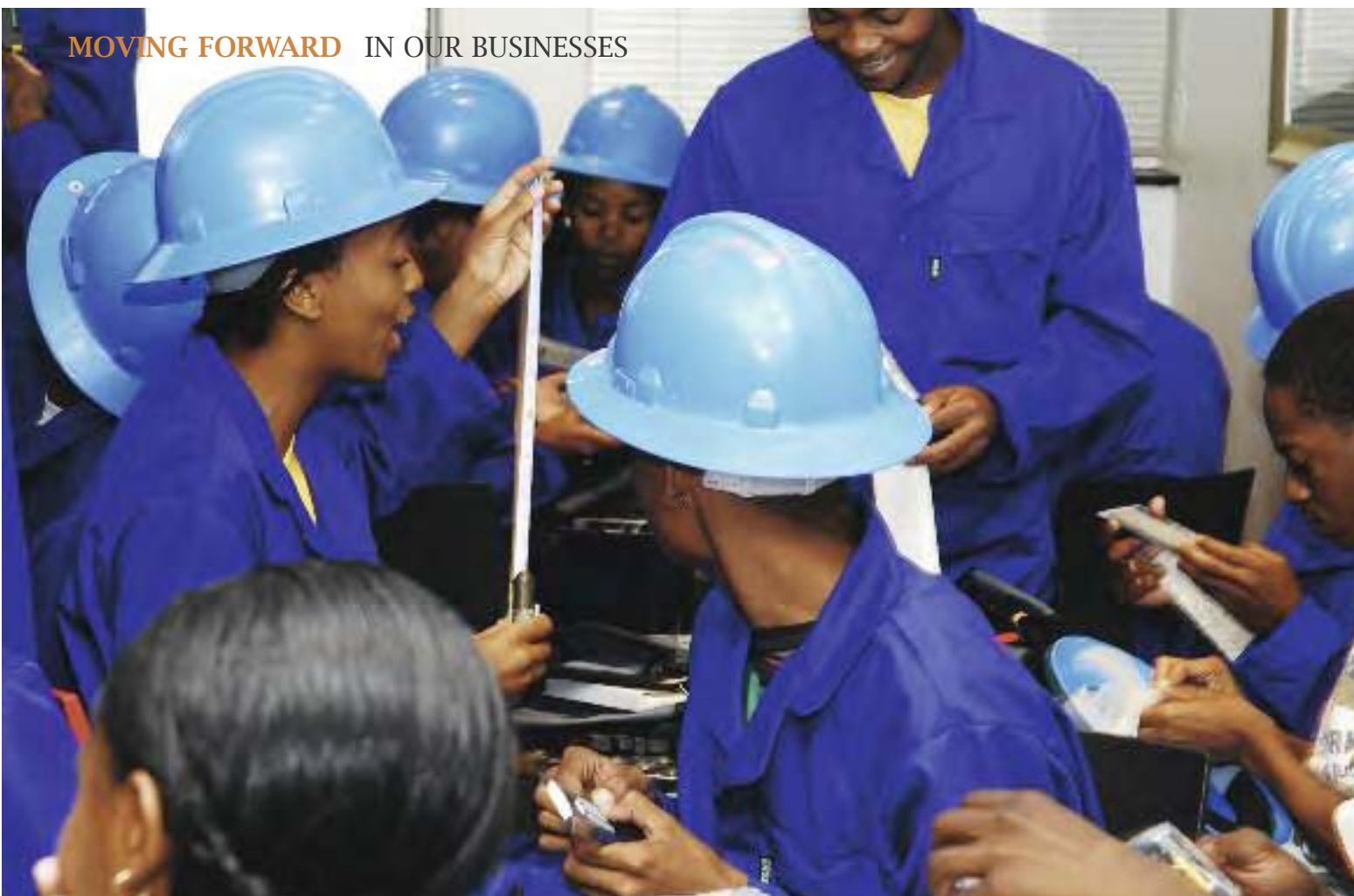
Thus, the acquisition in late 2007 of Orascom Cement, leading cement manufacturer in the Middle East, offers the Group an excellent platform for the development of its Aggregates & Concrete business in this region and in the Mediterranean area. More recently, Lafarge has started to develop in India with the acquisition of L&T Concrete. With 66 plants

across the whole country, it has allowed Lafarge to become the leader in concrete in a country where the potential for high added value concretes is important. What's more, an acquisition of this type makes it possible to integrate valuable local human resources.

Training first and foremost

"It's a fascinating aspect of our development," says Bradley Mulroney, in charge of Asia. We have to recruit, train and motivate managers in markets where the competition with other manufacturers is very strong." From this point of view, acquisitions represent an advantage in comparison to "greenfield" projects (which consist of starting up a new business), since they allow the Group to acquire experienced local teams who know the market. "In this way, the acquisition that we have made in India has ...

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Group of students from the Lafarge training center in Roodekop (2007 intake), South Africa.

... the benefit of making us immediately operational and so able to move fast," notes Bradley Mulroney. More than 50 employees of Lafarge India are today upgrading their training at sites in North America or South-East Asia and acquiring additional job-specific knowledge and experience. Furthermore, to train the future thousands of operators for China, India, North Africa, Central Europe and Latin America, the Aggregates & Concrete business is planning to establish five educational centers, sites entirely dedicated to training, in order to roll out the effective and environmentally-friendly methods developed by Lafarge over its many years of experience in the business. Thus, by developing its business and ensuring training for its future employees, Lafarge contributes, directly and indirectly to the development of the local economy.

Best practices and dedicated tools

The markets in which Lafarge chooses to operate benefit from its expertise and experience, thanks in particular to the application of the same quality standards and environmental protection standards everywhere, and the sharing and dissemination of its commitments to sustainable development. The best practices observed on Lafarge sites in emerging countries in turn sustain the Group's policy of excellence. The interac-

tions with these markets are marked by a real sharing of experience. Formal, dedicated tools have been developed to facilitate these exchanges because, wherever it is present, Lafarge sets great store by the creation of mutually beneficial relationships with the local community. Safety is one of the priorities in this respect. "It's an essential point," emphasizes Tom Farrell. "Imagine what an objective of zero accidents and the attention given to the health and well-being of the employees represents, when they live in regions where access to healthcare is not guaranteed and where ambulances are not always available nearby..." Gérard Kuperfarb concludes the analysis of this breakthrough into the emerging countries in these terms: "It's the sort of development that suits us, close to our 'building site' culture, where we start off with nothing to build something that lasts. There are so many projects to be completed in these countries, and everything moves so quickly." ■