



**Omya Canada Inc.**

*Omya, like the entire mining industry in Canada, creates wealth and provides value-added solutions.*

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## **1. Summary of Recommendations to the Energy and Mines Ministers**

### *Recommendation # 1:*

The Energy and Mines Ministers must make a fundamental contribution to the efforts of the mining industry. To do this, they must encourage their governments to implement a sound fiscal, energy and regulatory policy aimed at lightening the financial burden of corporations so that those corporations can increase productivity.

### *Recommendation # 2:*

Governments must develop an industrial strategy defining the framework for long-term development of the mining industry that contains a clear commitment to maintain and develop the industrial and manufacturing sector in Canada.

### *Recommendation # 3:*

When making decisions, the Energy and Mines Ministers must consider the direct impact of energy costs on our industry's economic health and, consequently, on their respective province's economic health.

### *Recommendation # 4:*

The Energy and Mines Ministers must come together and coordinate the training of future workers in the mining, metal and mineral industry. A pan-Canadian strategy is indispensable for attracting young people to this industry. Distributing university training centres, colleges and skilled trade centres geographically based on industry needs, while trying to eliminate possible disparities between the provinces and regions.

### *Recommendation # 5:*

The Energy and Mines Ministers must act together with their governments in influencing the monetary authorities to truly consider the impact of monetary policy on the economic health of the mining export industry.

### *Recommendation # 6:*

The Energy and Mines Ministers are encouraged to support and take part in developing all means that may simplify and standardize the legislation and regulations in force. This will reduce the financial burden on corporations and make them more competitive.

### *Recommendation # 7:*

The Energy and Mines Ministers are invited to work with their respective governments to encourage productive and effective investments by creating fiscal or other financial-based incentives.

### *Recommendation # 8:*

Omya Canada Inc. believes that the Energy and Mines Ministers should encourage different industries to use industrial minerals to a greater extent in order to reduce GHGs and enhance the environment. Omya is willing to lend its support and expertise if requested by governments.



## 2. Introduction

More than ever, the Canadian mining industry has a place in the global market and can be defined in terms of globalization. The mining industry has been feeling the effects of increased competition and of its own productivity, as well as the impacts of factors outside its scope of activity, such as global economic health. Although metal prices have increased, thanks to the development of emerging economies, over the past two years our industry has faced the cumulative effect of a substantial and rapid rise in the Canadian dollar against the US dollar, and a severe increase in energy costs resulting in higher costs of electricity rates and of transporting raw materials and finished products. In the mineral industry, the cost of electricity may represent over 30% of the costs of certain manufactured products. The impact is, therefore, considerable for a large portion of the export mineral industry that has not seen a notable rise in the price of its raw materials over the past few years. Instead, it has had to sustain very high downward pressure on the sales price of its manufactured products.

All provincial or federal political decisions have direct repercussions on the survival and investment ability of the mining industry. The Canadian mining industry generates wealth, but is also the source of raw materials that are indispensable to our daily lives. In Canada, the industry represents 4% of the Gross National Product (GNP) and accounts for about 2.5% of jobs. The wages paid are among the highest in Canada's entire industrial and manufacturing sector.

Given the impact of the mining industry on Canada's economic health, it is crucial that provincial governments and the federal government create policy conditions that will help this industry survive, grow and compete for investment capital that can migrate anywhere in the world. The highly negative impact of the value of the Canadian dollar and high energy costs has put several exporting industrial sectors in a non-competitive position. There is a real risk of some sectors disappearing, the effect has already been seen in other industrial sectors. It should not be cheaper to produce products in Europe, the US and even Asia that are exported to Canada, when those same products could continue to be manufactured in Canada. It is therefore the responsibility of the governments to mitigate the negative effects of monetary and energy policies by providing the policy environment that encourages corporations to continue to invest in Canada.

To do so, it is extremely important that governments develop an industrial strategy that will define the framework for long-term development of the mining industry. The strategy must contain a clear commitment to maintain and develop the industrial and manufacturing sector in Canada. Such a strategy should provide for a financial framework that encourages corporations to maintain and develop industry; the indisputable backbone of Canada's economic health. Ignoring monetary policy effects or the need for a long term, secure and stable energy pricing strategy in the industrial and manufacturing sector would be a grave error for Canada's future. Keeping inflation in check should also be a priority for maintaining industrial and manufacturing jobs.



In order for the manufacturing industry to remain competitive, it must be able to increase its productivity. This often means heavy investment. Several financial or fiscal instruments could help industry invest. All of the costs weighing on the industry, however, should also be considered. These instruments may be negatively effected by legislative, regulatory and legal red tape, including, for example, the provincial/federal complexity and duplication of the process through which one must pass to obtain licenses or defend them in the case of an appeal by the public. Governments are equipped with a wide array of solutions that can help the industry or, conversely, render it non-competitive.

**The Energy and Mines Ministers must make a fundamental contribution to the efforts of the mining industry. To do this, they must encourage their governments to implement a sound fiscal, energy and regulatory policy aimed at lightening the financial burden of corporations so that those corporations can increase productivity.**

This type of industrial strategy should also integrate the skilled labour shortage problem. This shortage has already begun and will worsen in the years to come. A dynamic and concerted policy on training, immigration, recognition of foreign diplomas, etc., is imperative as the competition for hiring is no longer found only on the provincial or national level, but also on the international level. The availability of skilled labour may affect the future competitiveness of our corporations.

The other crucial element for mining industry development is support for exploration. Federal government investment in basic geoscience has declined by 50% since 1980. Canadian mineral reserve levels are declining, and have been declining for over two decades.

With the world getting smaller day-by-day, and emerging countries becoming increasingly competitive, it is becoming indispensable for the governments of Canada to confer and work together with industry to establish industrial policies. This is especially crucial if we want to maintain and increase our standard of living.

**Governments must develop an industrial strategy defining the framework for long-term development of the mining industry that contains a clear commitment to maintain and develop the industrial and manufacturing sector in Canada.**



## 2.1 Omya in the world:

Omya is the world leader in the manufacturing and selling of industrial minerals such as calcium carbonate, talc and dolomite. Approximately 6,000 employees working at more than 100 sites in over 50 different countries produce fillers and coating pigments for paper, plastics, paints and coatings, glues and chemical agents for construction, the agricultural and environmental industries. Omya has remained a private company since its founding in 1884. The durability and quality of its finished products and services are the guidelines for its activities.

Most Omya plants are ISO 9001 (Quality), ISO 14001 (Environment) and OHSAS 18001 (Health & Safety) certified.

Ecological efficiency is a primary goal for Omya. For example, in collaboration with the University of Leoben in Austria, Omya developed the design of the gravity well for hauling rocks. This will eliminate the noise and dust usually associated with hauling, and it is now widely used in mining operations around the world.

Being a good corporate citizen is fundamental for Omya. Omya's plants work with environmental groups, support museums and sports clubs, numerous professional and cultural associations, and work closely with schools, technical colleges and universities.

## 2.2 Omya in Canada

Omya Canada Inc. is the result of the merger of former companies Steep Rock Resources Inc. (Perth, Ontario) and Industrial Fillers Ltd. (St-Armand, Quebec).

These two operations produce different grades of calcium carbonate-based finished products for numerous industries: paints, plastics, floor coverings, cement joints, construction materials and paper. Only the Perth plant produces grades for the paper industry. Both sites employ approximately 150 people directly and 300 people indirectly with local contractors.

Omya Canada has large raw material reserves in Quebec, Ontario, Newfoundland and British Columbia.

## 2.3 Opportunities and Challenges

In addition to these raw material reserves, Omya Canada Inc. also has a very large production capacity. Its Ontario plant was completely rebuilt between 1994 and 2000, at a cost of several hundreds of millions of dollars, using the Omya group's most advanced technology. During that period, this expense represented the largest investment made in Ontario in the mineral industry. The plant's production capacity has increased five-fold between 1992 and 2006.



This plant exports about 70% of its production to the United States. Growth opportunities, in particular for products for the paper industry in Canada and the US are vast. However, several negative factors, such as the recent rise in the Canadian dollar and energy costs, have made the plant less competitive and curbed growth prospects. This cumulative effect makes it more attractive for Omya to produce at one of its US plants to supply certain Canadian plants in the paper industry with finished products.

In addition to this negative impact, the same factors will lead certain Omya Canada Inc. clients to shut down their own plants, which magnify the difficulties already encountered.

As will be explained further on, there are significant growth prospects for the mineral filler industry. They are, in part, directly or indirectly linked to the environment and the potential solutions they can represent in the goals to reduce greenhouse gas (GHG) emissions.

### **3. Industrial mineral issues within the general context of the mining industry**

#### **3.1 Common issues:**

The mining industry must deal with market globalization and increasingly stiff competition. Due to the increase in costs related to factors beyond its control, such as foreign exchange rates or energy costs, investments must be made to improve productivity in this field. These investments are generally quite heavy and are sometimes difficult to justify due to an insufficient return on investment in Canada and can compound to other jurisdictions.

The shortage of skilled labour, which has already begun, is an added impediment.

Exploration to identify future resources is a constant concern if this industry is to enjoy long-term survival.

#### **3.2 Specific issues:**

Metal prices are driven by the market and therefore prices experience significant fluctuation. Industrial minerals such as calcium carbonate, talc, dolomite and others are not subject to market pressures in their raw form and their finished products are therefore much more heavily influenced by energy and other government policies during the manufacturing process. As a consequence, the only way for companies to cope with the effects of government policies and remain sustainable is to increase productivity and/or lower product prices both of which can happen but within limits.



### 3.3 Energy costs and supply

The mining industry is a major energy consumer. The cost of electricity alone may sometimes account for over 30% of the company's costs. Therefore, all rate hikes have a direct repercussion on the company's economic health.

The energy crisis is world-wide and its impact differs according to the country. Such is the case in Canada, with different cost/benefit outcomes according to the province.

Omya encourages all energy conservation measures. Omya Canada Inc. has become involved in a very aggressive program to minimize its energy consumption.

There are three fundamental criteria relating to our energy policy concerns:

- Reliability of supply
- Competitiveness of prices
- Long-term predictability of prices

Without seeking to take a position on how governments discriminate in favour of their province's combination of energy sources, governments must focus their attention on the potential imbalance between the ability to supply energy in North America versus demand. Energy costs are threatening jobs. Industrial economies are dependent on competitively priced power and a reliable supply. Therefore, fuel mix decisions need to be based on the type of jobs and economy we desire. Despite record high drilling levels for natural gas in the US and Canada, supply is relatively flat and falling after 2013 (source: Canadian Energy Research Institute)

**When making decisions, the Energy and Mines Ministers must consider the direct impact of energy costs on our industry's economic health and, therefore, on their respective province's economic health.**

### 3.4 Shortage of skilled labour

The foreseeable shortage of skilled labour threatens all industry sectors in Canada. To ensure that industry is not the main victim of inevitable competition on the national and international job market, a collective action plan must be put in place on an urgent basis for all of Canada by the provinces and the federal government. The challenge is no small undertaking and numerous local and provincial initiatives are already underway. The mining associations of Quebec and Ontario have made this challenge a top priority of their strategic plans for the coming years.. A genuine strategy for providing training in the mining, metal and mineral trades must absolutely be implemented straight away. This strategy must consider the possible contribution of all social groups. Government policies on university and college training, as well as labour training programs and immigration, are critical to prevent the mining industry in Canada from becoming less competitive globally.





The age of the minerals and metals industry workforce is higher than that of the overall Canadian workforce with approximate 25 – 40% of current workers retiring within 10 years. Beyond simply replacing retired workers, the industry will need to expand its labour force to meet demand. The Canadian mining industry will need up to 81,000 people (not including the oil sands) to meet current and future needs and to fill positions vacated by retirees.

**The Energy and Mines Ministers must come together and coordinate the training of future workers in the mining, metal and mineral industry. A pan-Canadian strategy is indispensable for attracting young people to this industry and distributing university, college and training centres geographically based on industry needs, while trying to eliminate possible disparities between the provinces and regions.**

### 3.5 Canadian dollar value versus the US dollar

The rapid and significant increase in the value of the Canadian dollar (up 34% against the US dollar since 2003) has had extremely negative impacts on the export manufacturing industries. In certain sectors of the industry, companies have closed down.

It is certain that the Canadian monetary authorities have only a limited influence on the value of the Canadian dollar. It is however hoped that the authorities will exert any possible influence to limit the appreciation of the Canadian dollar. A concerted effort to control inflation, thereby minimizing the negative impact on corporate competitiveness and potential jobs, should also be a priority.

**The Energy and Mines Ministers must act together with their governments to help affect the monetary authorities to consider the impact of monetary policy on the economic health of the mining export industry as well as other sectors within our economic structure in Canada.**

### 3.6 Legislation and Regulations

The mining industry is faced with a patchwork approach to legal and regulatory requirements across Canada. With respect to the environment and energy, there are often overlapping layers of approval between the federal and provincial levels of government. Criteria for obtaining permits and licenses should be grounded in science-based standards rather than subjective factors. Mining is one of the most heavily regulated industries in Ontario. Current regulatory complexity and unpredictability often cost companies time and money and are barriers to investment and job creation. Similarly, they can cost government and communities' time and money by delaying the benefits, which flow from responsible mineral development.



While the industry accepts, complies and cooperates with the need for regulation and public transparency on all fronts, it believes everyone would benefit from an untangling of duplicate and overlapping regulations, as well as from the introduction of clear timelines and service delivery standards.

An efficient and relatively inexpensive way of reducing the corporate financial burden is to make the companies more competitive while simplifying and standardizing the legislation and regulations in force.

**The Energy and Mines Ministers are encouraged to support and take part in developing all means that may simplify and standardize the legislation and regulations in force so as to reduce the financial burden of corporations and make them more competitive.**

### 3.7 Investment Environment

The mining industry must make considerable investments to achieve the desired level of competitiveness. It must therefore have the means to be able to justify its return on investment with its shareholders. There are quite often optimization investments aimed, instead, at reducing costs that make it difficult to achieve a return on investment.

**The Energy and Mines Ministers are invited to work with their respective governments to encourage productive and effective investments by creating fiscal or other financial-based incentives.**

## **4. Omya and solutions for improving the environment.**

The mining industry's top priorities are those that involve enhancing environmental performance and improving occupational health and safety. Great strides have been made in the last number of decades on both of these fronts but the industry still must deal with legacy issues at home and abroad. However, the Canadian mining industry is known throughout the world for its leading-edge mining technologies and a recent survey commissioned by the Mining Association of Canada found that 69% of Canadians see mining as an industry of important strategic interest to Canada and 85% of Canadians believe that mining is an innovative, high-tech industry.



Sustainable development is inherent to the mining industry's plans for development. Omya Canada Inc., like many other corporations, has invested heavily over the past years in equipment to reduce airborne dust emissions, to reduce noise emissions by enclosing its equipment in insulated buildings, and also by using state-of-the-art technological equipment to provide its employees and the community with a very healthy production environment. Its Ontario plant and quarry are ISO 14001 certified. Its Quebec plant and quarry, which are smaller in size, have a similar internal standard (Ecomya) and have high environment and sustainable development goals. In all its world-wide activities, Omya supports sustainable development and works with communities and different associations on actions for improving the mining conditions of its plants and raw material extraction sites.

In addition to its unwavering commitment to sustainable development, and through the properties of the calcium carbonate, Omya is able to make a significant contribution to Canada's goals for reducing greenhouse gases (GHG). The introduction of calcium carbonate as a mineral filler in numerous finished products such as paper, plastics, concrete, etc., not only improves several of their physical properties, but can also make a major contribution to reducing, in particular, energy consumption, tree throwing and petroleum consumption.

#### 4.1 Calcium carbonate

Calcium carbonate ( $\text{CaCO}_3$ ) is a non-toxic, odourless white solid that is virtually insoluble in water.

About 4% of the Earth's crust is made up of calcium carbonate, making it one of the most abundant natural raw materials on the planet.

Chalk, limestone and marble are its three forms with the greatest commercial usage. Even stalactites and stalagmites, pearls and many other minerals are made from calcium carbonate.

Vast quantities of this mineral exist in the form of hydrogenated calcium carbonate dissolved in rivers, lakes and oceans. Calcium carbonate is very widespread in nature, where it forms the skeletons of mollusks, corals and algae.

#### 4.2 Calcium carbonate and health

Calcium carbonate is one of the most important constituents of the human body, representing about 10% of our skeleton. We therefore have corresponding needs for it.

That is why calcium carbonate is prescribed for medical reasons during pregnancy and nursing, adolescence and for treating osteoporosis.

This natural mineral is an approved food additive and is an ingredient in many products such as breakfast cereal, chewing gum, yogurt and baking flour.



### 4.3 Calcium carbonate and the environment

Given its neutral nature, calcium carbonate acts as a natural buffer against aggressive chemical agents such as sulfuric and hydrochloric acid - a property that proves that it is capable of effectively protecting the environment. Calcium carbonate is a desulfurization agent for exhaust gases from thermal power plants, in which it helps to convert sulfur dioxide into recyclable gypsum.

This mineral is also used by the public utilities to regulate the pH level in drinking water supplies. Calcium carbonate is also used to counteract the effects of acid rain on lakes and rivers. In northern Ontario, for example, the endangered Aurora trout was saved in Whirligig Lake following treatment of the lake with calcium carbonate from our Perth plant. Calcium carbonate, in a form patented by Omya, is used for the ecological treatment of petroleum product spills in bodies of water.

In farming, calcium carbonate is also used as a fertilizer to regulate soil pH and to provide sufficient food for growing plants. This nourishing mineral for plants stabilizes cell walls, controls cell metabolism and facilitates root growth.

Dietary calcium carbonate has long been an important ingredient in commercial feed for animals. As in human food, calcium carbonate provides an ideal source of calcium for rural livestock.

### 4.4 Calcium carbonate and industry - Positive effects on GHG reduction.

The extreme whiteness and purity of calcium carbonate, in addition to its availability worldwide, makes it an ideal raw material for many industrial applications. For example, per capita consumption in Germany is about 100 kg and continues to grow.

- *In paper:* In Quebec, 2% to 7% calcium carbonate could be added when manufacturing newspaper or mechanical pulp. This would result in 68,400 to 240,000 tons of trees being saved annually, respectively.

Moreover, the introduction of calcium carbonate as a filler during paper manufacturing significantly reduces energy consumption because it helps to accelerate paper drying due to the hydrophobic nature of calcium carbonate. The fibres retain much more water.

The conversion of the Canadian paper industry from an acid process to a basic process is desirable to facilitate the use of calcium carbonate-based fillers.

- *In concrete:* Replacing 10% of cement in concrete with **Betocarb**, a product newly developed by Omya, would reduce CO<sub>2</sub> emissions generated during cement manufacturing by 10%. This substitution could save 12 million tons of CO<sub>2</sub> out of the 120 million tons emitted annually by the North American cement industry.



- *In plastics:* plastics can contain up to 70% calcium carbonate. Depending on applications, calcium carbonate improves mechanical and thermal properties and increases the flow of production machines during manufacturing. Thus, calcium carbonate is a raw material substitute based on polymers from petroleum, and therefore an important boon to the environment.
- *Many other applications:* Treatment of acidity in barren rocks, treatment of pig slurry, use in mine blasting explosive formulas by replacing fumed silica, leaving the ambient air free of silica particles and thus protecting workers, prevention of explosions in gold, coal and copper mines when used in mine dust as a dispersing agent to prevent the formation of critical masses that may cause explosions, etc.

**Omya Canada Inc. believes that the Energy and Mines Ministers should encourage different industries to use industrial minerals to a greater extent in order to reduce GHGs and enhance the environment. Omya is willing to lend its support and expertise if requested by governments.**

## **5. Conclusion:**

In an increasingly competitive and globalized world, the mineral industry has many significant challenges to face. Some are beyond its jurisdiction because they are due to uncontrollable factors that can be affected by government policies. However, governments have the ability to minimize negative effects by acting on taxation, by simplifying and standardizing legislation and regulations and by developing an energy policy that secures current and future investments.

Omya is committed to making its contribution and to working with all levels of government in search for solutions to make our industry more competitive, and also help other industries meet their cost reduction and environmental goals.

Omya has been developing its expertise in many fields for nearly 75 years. This expertise is available to its clients and to any governments requiring it.

Using calcium carbonate is a major asset to help Canada reach its goals in reducing greenhouse gas emissions. It is a natural resource with many advantages and is ready to be utilized.

Omya, like the entire mining industry, provides value-added solutions for jobs, tax revenue and sustainable environmentally sound economic development.

Making our industry competitive means ensuring the economic health of the communities in which it operates and, therefore, the economic health of the provinces and Canada.