

June 11, 2003

The Honorable Spencer Abraham
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Mr. Secretary:

The National Lime Association (“NLA”), representing approximately 95% of U.S. commercial lime production, is very pleased to submit this letter in response to President Bush’s challenge to the business community to contribute to the goal of reducing the intensity of greenhouse gas emissions of the American economy by 18% in the next decade.

NLA and its members commend the President for his decision to address the global climate issue by means of voluntary measures, rather than subjecting the American economy and our citizens to the devastating consequences of mandatory requirements such as those contained in the Kyoto Protocol and other proposals.

In answer to the President’s call, the members of NLA have established a goal of reducing the intensity of greenhouse gas emissions from energy use in the lime industry. NLA members will pursue this goal by, on an aggregate basis, reducing greenhouse gas emissions from fuel combustion per ton of product by 8% between 2002 and 2012. This goal, as well as other voluntary steps the industry will take, is explained in more detail below.

THE LIME INDUSTRY

NLA is the trade association for manufacturers of high calcium quicklime, dolomitic quicklime, and hydrated lime, collectively referred to as “lime.” Quicklime, or calcium oxide, is produced by subjecting limestone, or natural calcium carbonate, to high levels of heat. Some lime is further processed by the addition of water, creating hydrated lime or calcium hydroxide. Finally, some lime is made from stone containing both calcium and magnesium compounds, with the final product, called dolomitic quicklime, containing calcium oxide and magnesium oxide. Lime is a basic chemical commodity and is used in many applications, including steel manufacturing, drinking water treatment, construction, soil stabilization, flue gas desulfurization, sewage treatment, pulp and paper manufacturing, and chemical manufacturing. Lime is vital to many environmental and pollution reduction applications, such as flue gas desulfurization, which uses approximately 15% of the total lime produced each year. In many applications, there are no technical or economic alternatives to the use of lime. In other cases lime is used to save energy, thus reducing greenhouse gas emissions relative to alternatives.

In 2002, 99 lime production plants in 32 states produced 18 million metric tons of lime products. The members of NLA manufacture approximately 95% of commercial lime produced in the United States. Nearly half of the companies are small businesses, and many have no operations other than lime production.

THE LIME INDUSTRY AND GREENHOUSE GAS EMISSIONS

A very small portion of the carbon dioxide emitted in the United States — approximately 0.4%— comes from the production of lime. No other greenhouse gases are emitted in significant amounts from lime manufacturing operations.

Carbon dioxide is emitted from the production of lime in two ways. First, because lime is produced by heating limestone to a high temperature, typically fossil fuels are used to achieve this heating. The combustion of these fossil fuels generates CO₂. In the United States, the chief fuel used in lime kilns is coal (sometimes in conjunction with coke). Some kilns are equipped to use natural gas, but the high relative cost of natural gas has idled most of these operations.

CO₂ is also produced, however, in the chemical process that occurs when limestone is heated to form lime. At high temperatures, limestone, or calcium carbonate (CaCO₃), is “calcined” and decomposes into lime, or calcium oxide (CaO), and carbon dioxide (CO₂). This inherent chemical process accounts for 55% of the CO₂ emitted from lime manufacturing. There is no way to reduce these calcination-related emissions other than reducing lime production. It should be added, however, that a significant amount of CO₂ — equal to approximately 22% of the calcination-related CO₂ emissions from lime manufacturing — is reabsorbed (sequestered) by lime products in the course of their use. This level of sequestration substantially reduces the impact of process emissions.

The lime industry has already made important strides in reducing its greenhouse gas intensity, as it has worked for many years to improve its energy efficiency, and some lime kilns are already highly efficient. It is estimated that aggregate lime industry energy-related greenhouse gas intensity has decreased by approximately 5% between 1995 and 2002 primarily due to highly capital-intensive equipment and operational changes that resulted in improved fuel economy. There have been some setbacks in this process, as natural gas became too costly for use in lime production.

The lime industry, through NLA, has studied the issue of greenhouse gas emissions, and has formed an executive-level task force to identify steps the industry can take to respond to the President’s call for voluntary efforts. The goal set out in this document is the result of that task force’s labors.

THE LIME INDUSTRY GOAL

As indicated above, the basic chemistry of lime production renders it impossible to reduce the intensity of calcination-related greenhouse gas emissions. Thus, the lime industry's goal focuses on reducing the greenhouse gas intensity of combustion-related emissions, which can be addressed through energy efficiency improvements and other means.

The elements of the lime industry plan are as follows:

1. *Emissions Intensity Goal*— NLA members will, on an aggregate basis, reduce greenhouse gas emissions from fuel combustion per ton of product by 8% between 2002 and 2012. Lime companies will pursue a variety of strategies to achieve this goal, including (but not limited to) physical modifications to kilns to improve energy efficiency, operational changes, increased reuse of byproducts, use of alternative fuels, use of green power, carbon sinks and sequestration, transferable credits if available, and offsets. Because this is an aggregate goal, not all lime companies will have the same intensity goal, depending on what efficiency improvements have already been achieved before 2002, and what kind of equipment the company operates.
2. *Emissions Protocol*—By October of 2003, NLA will develop a protocol for quantifying greenhouse gas emissions and emission reductions from lime manufacturing facilities. This protocol will be used to measure progress in pursuing the numerical intensity goal.
3. *Biannual Report*—By July of 2004, NLA will compile and report to DOE on aggregate industry trends in greenhouse gas intensity (emissions per unit of production) and submit biannual reports thereafter.
4. *Research Projects*—NLA will identify research projects that could lead to further improvements in energy efficiency and other means of reducing greenhouse gas intensity, such as sequestration, and will seek to cooperatively fund such projects with government agencies and other entities.
5. *Education*—NLA will provide support and education for its members in their efforts to achieve its goals, through meetings, publications, and other methods.

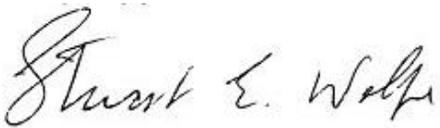
NLA firmly believes that reductions in greenhouse gas intensity will occur as a result of a partnership between government and the private sector. There is much that the government can do to address regulatory barriers that inhibit progress towards these goals, as well as to support voluntary efforts by the lime industry, as identified in the attachment to this letter. In particular, we encourage the Administration to rationalize and manage the implementation of regulations that impede the permitting of projects to improve the efficiency and environmental performance of lime manufacturing operations.

NLA looks forward to a robust partnership with DOE. NLA's members would be interested in working with DOE on the development of a plan to implement the elements of the lime industry's proposal listed above, and seeking ways in which DOE programs can support and complement the lime industry's objectives and planned activities.

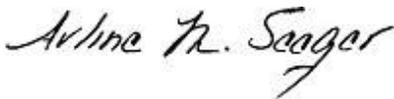
NLA and its members are committed to using their best efforts to achieve the goals outlined above. Their ability to ultimately achieve, or even exceed, these goals will depend on many factors, including partnership with the government and other entities, the state of the economy and the economic health of the lime industry, and the continued involvement of all the companies in the industry. It should be noted that while NLA represents approximately 95% of U.S. commercial lime production, the association does not represent the small number of lime producers that do not belong to the association.

NLA and its members look forward to working with your Department on meeting these goals together.

Very truly yours,



Stuart Wolfe
Graymont Group
President, National Lime Association



Arline M. Seeger
Executive Director, National Lime Association

cc: The Honorable James L. Connaughton, Chairman
Council on Environmental Quality

LIME INDUSTRY/GOVERNMENT COOPERATIVE OPPORTUNITIES

The following identifies government actions and cooperative efforts between the government and NLA which will enhance the ability of the lime industry to meet its Climate VISION goals:

1. *Regulatory Streamlining*—Regulatory requirements should be harmonized so that projects to reduce greenhouse gas intensity can receive timely permits from federal and state authorities. The recent reforms to EPA’s New Source Review Program should remove substantial impediments to energy efficiency improvements. However, requirements under other environmental regulatory schemes, such as the emission standards for nitrous oxides, also need to be addressed to avoid costly delays for such projects.
2. *Alternate Fuels*—Government assistance will be needed to obtain permits to use alternative fuels, including biomass and waste-derived fuels.
3. *Tax Code Improvements*—Tax treatment of greenhouse gas reduction projects should be reexamined, and revised to encourage such projects.
 - a. *Investment tax credits* should be enacted to allow capture of greenhouse gas investments in alternative fuels, fuel efficiency improvements, CO₂ capture, and utilization of co-products. Credits should be available for modifications of processes and equipment to reduce the intensity of greenhouse gases.
 - b. *Depreciation* should be accelerated, or expensing allowed, for capital expenditures that reduce greenhouse gas intensity. Recent legislation has made some progress in this area, but more should be done. For example, the Jobs and Growth Tax Relief Reconciliation Act of 2003 allows businesses to increase expensing of energy-efficiency related projects up to \$100,000. This is an important first step, but the amount of expensing should be increased and limitations on the program designed to restrict its application to small businesses should be removed. Similarly, the Job Creation and Worker Assistance Act of 2002, as amended in the 2003 tax bill, established a “bonus depreciation” program that allows an additional first-year depreciation deduction equal to 50 percent of the value of industrial property. However, this program only applies to property acquired before January 1, 2005. The deadline should be extended.
4. *Funding Assistance*—Many facilities, especially small businesses, will need help in funding greenhouse gas intensity-reduction projects, in the form of grants, loan guarantees, or otherwise.
5. *User Cooperation*—The lime industry may need the assistance of the government to persuade some lime customers to accept changes in product characteristics resulting from greenhouse gas intensity reductions. For example, changes in kiln type to reduce energy use can result in higher levels of sulfur in lime, and some steel companies are resistant to accepting such material.

Foreign Imports—The government should act to ensure that domestic companies that take steps to reduce greenhouse gas intensity do not lose market share to products imported from foreign industries that have not been required to take such steps. For example, dolomitic lime competes in the steel market against magnesium oxide imported from China where greenhouse gas emissions will not be subject to reductions under the Kyoto Proto