## Preface

The end of each new rating is the beginning of a new journey for all of us. The Green Rating Project (GRP), as a process is a great teacher of detail and substance. It takes a long time to understand the industry and therefore the environmental issues that come out of the rating are always more than what is normally perceived by most, including the industry and the regulators.

In 1999, when we released the first rating on the pulp and paper industry, we learnt of the impact of industry on resources — wood and water in this case — but we also learnt that industry is prepared to innovate and change. Each time we began, we also found that we had to invent the process. For instance, the cement companies have not been rated earlier for their environmental performance and so no methodology to do this existed. We, therefore, had to develop everything — the methodology, the rating criteria and the weightages. More importantly, we had to understand the challenges, this sector faces and the challenges the country faces, because of this sector. This helped us to benchmark change.

This is something that CSE's founder director Anil Agarwal — who conceived this project — always had in mind. He never thought of GRP as a mere rating exercise, rather a tool to leverage a larger change that was required for the country to achieve sustainable economic growth. He always emphasised that GRP should not only improve the environmental practices of companies, but it should also change the policy and regulations. In the three sectors we have rated before cement, we hope we have lived up to his expectations.

GRP's rating of the automobile industry in 2001, was notable for its success in introducing transparency within the sector — that too at a time when CSE had an ongoing campaign against the dieselisation of private vehicles, which was hurting many major companies. Companies submitted even emissions certificates of their vehicles for public disclosure. Interestingly, many of them had refused to share this with even the Central Pollution Control Board.

The rating of the chlor-alkali sector in 2002 had a profound impact not only on companies and regulators, but also on the science of monitoring pollutants. It fundamentally changed the way mercury is regulated globally. During the rating process, we discovered that more than half the mercury consumed in the plants remained unaccounted for. After extensive studies, we concluded that the traditional end-of-pipe emissions' monitoring was inadequate to regulate mercury. We therefore, proposed a paradigm shift — regulators should focus on mercury inputs to the plant and not emissions. This was supported by regulators across the world. The Indian government on its part introduced guidelines to regulate input mercury.

We have rated the pulp and paper sector twice — in 1999 and in 2004. This provided us with an opportunity to assess GRP's impact on industry. The first major impact we noticed was the willingness of companies to participate. In the first rating, it had taken us more than a year to persuade them; in the second, GRP received consent letters from all within the first month. The rating revealed that the paper industry had improved significantly on the back of the awareness and pressure created by GRP. In the first rating, only 30 per cent of the plants had a formal environment policy; this rose to 90 per cent during the second. In the first rating, only one company was ISO 14001 certified; during the second, 13 had this certification. Water and chlorine consumption had fallen significantly and the sector was sourcing most of its wood from farm and social forestry.

## **Cement's challenges**

The cement industry's rating is no different. It was exhaustive, both from the perspective of the number of companies and the extensive process that we designed for this rating. We ended up selecting 41 cement plants of 23 major companies; spread over nine states of India — the biggest exercise GRP had ever undertaken.

When we started understanding this industry, the first thing we realised was that we not only had to assess the plants, but also their captive mines. Since we use the life cycle analysis process for rating companies we had to rate their raw material sourcing practices as well as their products.

The development of the rating methodology was an arduous task, more so for mines, because there is no benchmark to assess whether a mine is good or bad. So far regulators have treated each mine as a special case, and therefore each mine is regulated differently. We therefore had to develop benchmarks for good mining practices.

As far as the production plant is concerned, the Indian cement industry takes pride in being one of the most technologically advanced and energy efficient in the world. And rightly so. Energy is the major cost this industry incurs and they do everything to reduce this. They have started adding wastes like fly ash and blast furnace slag to reduce energy consumption. They have a green edge over other sectors.

We find the sector emits far less  $CO_2$  than its counterparts in most developed countries — an important message to give to the North, which believes that developing countries like India are not doing enough for global warming. However, where environment and economics do not meet, this industry performs very poorly. These areas include mine management and mine rehabilitation on one hand, and fugitive dust control and social initiatives, on the other.

The message from GRP is quite clear: the sheer size of the cement industry will create environmental problems in the future, so there is no scope for complacency in either industry or the regulators.

> — Sunita Narain Chandra Bhushan