



GREEN RATING PROJECT

**A CLEAN
ENVIRONMENT
MAKES
PERFECT
BUSINESS
SENSE**

THE GREEN RATING PROJECT (GRP) assesses, and makes public, the environmental performance of companies within a sector in India. It aims to reduce the impact of industrial activity on the environment. It also aims to partner industrial sectors and embed sound environmental management principles into their production practices. It is a programme of the New Delhi-based non-profit Centre for Science and Environment. Since its inception in 1997, GRP has rated the following sectors: paper, automobile, chlor-alkali, cement, iron & steel and thermal power.

The United Nations Development Programme and then Union Ministry of Environment and Forests have supported this project during its inception phase.

WHY GRP IS CONTEMPORARY

For companies, the choice today is no longer between the low-hanging fruit of compliance and the PR of sustainability. Today, better environmental performance equals profitability + competitiveness + improved morale + improved customer relations + smiling investors + a satisfied public. First-to-market is the way ahead.

First-to-market is a core challenge GRP encourages companies to take up. Don't just clean up because you have to meet legal standards; clean up to make your business sustainable—economically and ecologically. Fundamentally change the way the market thinks about how you do business.

Yes, given its market-oriented monitoring framework, GRP is also a reputation incentive.

WHY GRP IS CREDIBLE

GRP is independent, participatory and transparent. It is rigorous. GRP evaluates a plant's life-cycle environmental impacts, from sourcing and processing of raw materials to the manufacture, use, and disposal of products. Such analysis requires exceptionally detailed data.

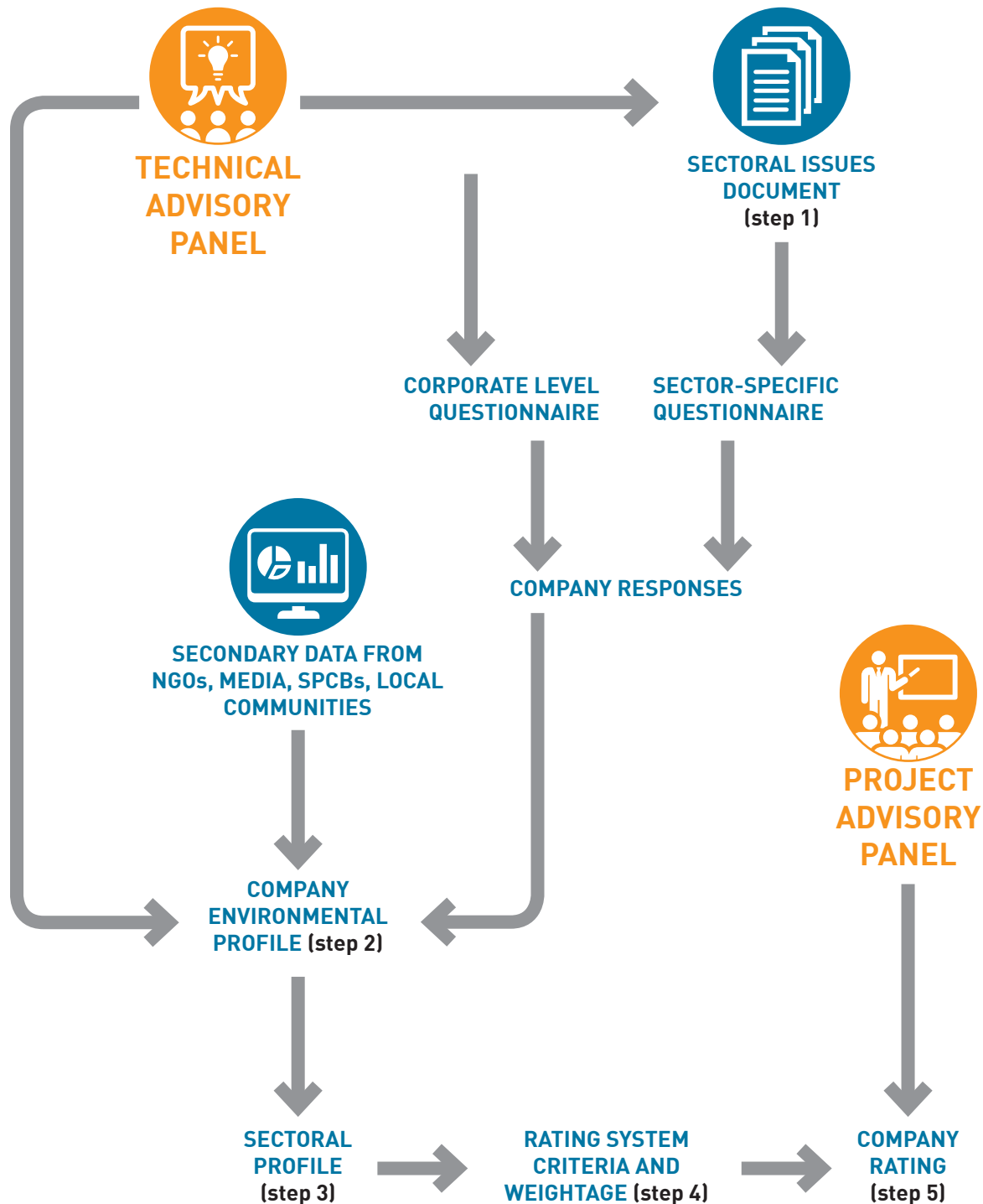
Data are collected from plants that agree to participate in the rating process. Secondary data, such as that local environmental regulatory institutions possess, are also factored in. Self-reported data from companies are carefully checked by GRP inspectors and compared with the secondary data. The programme uses both data sets to construct a detailed environmental profile of each plant. The profiles benchmark the plant's performance against its peers and global best practices. It also informs plants about their pollution levels and pollution abatement options.

The questionnaire used to collect data, as well as the methodology used to analyse it, is designed with the help of a Technical Advisory Panel, which comprises of leading technical experts in the sector. To ensure further objectivity and transparency, the entire GRP programme is supervised by a Project Advisory Panel comprising of high-level representatives from industry, government, the judiciary, academia and non-governmental organisations.

The appraisal GRP makes is first sent to the plant for review. Then, all information about a plant's environmental performance is placed in the public domain. Yes, GRP is India's only Public Disclosure Programme.

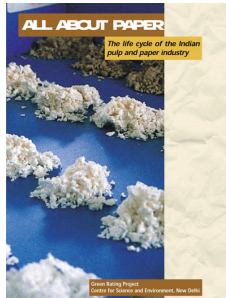


FIVE STEPS TO ASSESSMENT



THE GREEN RATING IS NOT A SCORE...

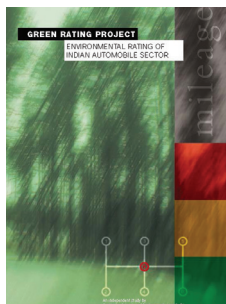
PREVIOUS RATINGS



1999 & 2004

PAPER AND PULP SECTOR

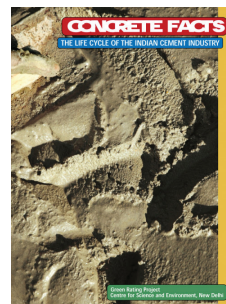
34 production units of 30 companies, comprising of more than 50% of the country's capacity were rated. 90% participated voluntarily



2001

AUTOMOBILE SECTOR

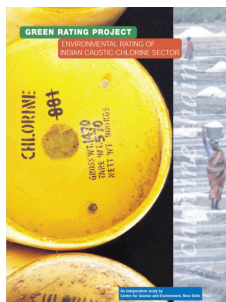
51 base models of 29 companies, comprising of 80% of the country's capacity were rated. 89% participated voluntarily



2005

CEMENT SECTOR

41 production units of 23 companies, comprising of 83% of the country's capacity were rated. 87% participated voluntarily



2002

CHLOR-ALKALI SECTOR

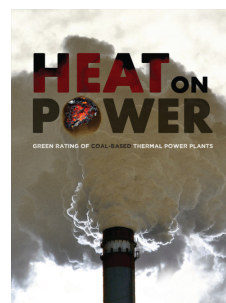
25 production units of 22 companies, comprising of 91% of the country's capacity were rated. 88% participated voluntarily



2012

IRON AND STEEL SECTOR

21 production units of 17 companies, comprising of 68% of the country's capacity were rated. 62% participated voluntarily



2015

THERMAL POWER SECTOR

47 production units of 32 companies, comprising of 55% of the country's capacity were rated. 46% participated voluntarily

COMPANIES IN INDIA ARE PERFORMING BETTER TODAY.
WE SHOWED THEM HOW THEY COULD...

THE FIVE LEAVES AWARD*



1999

PAPER AND PULP SECTOR

HIGHEST AWARD: THREE LEAVES

- JK Paper Ltd, Rayagada
- The Andhra Pradesh Paper Mills Ltd, Rajahmundry
- Ballarpur Industries Ltd, Ballarpur

2001

AUTOMOBILE SECTOR

HIGHEST AWARD: THREE LEAVES

- Daewoo Motors India Ltd, Greater Noida
- Hyundai Motors India Ltd, Sriperumbudur
- General Motors India Ltd, Halol
- Mercedes-Benz India Ltd, Pune
- Hero Honda Motors Ltd, Haridwar
- Maruti Udyog Ltd, Gurugram
- Honda-Siel Cars India Ltd, Greater Noida
- Ford India Ltd, Chennai
- Fiat India Ltd, Pune

2002

CHLOR-ALKALI SECTOR

HIGHEST AWARD: THREE LEAVES

- Chemfab Alkalis Ltd, Puducherry
- Shriram Alkalis & Chemicals Ltd, Bharuch
- Indian Rayon & Industries Ltd, Junagadh
- Indian Petrochemicals Corporation Ltd, Bharuch
- Search Chem Industries Ltd, Bharuch
- Sree Rayalseema Alkalis & Allied Chemicals Ltd, Kurnool
- Tamilnadu Petroproducts Ltd, Chennai

2004

PAPER AND PULP SECTOR

HIGHEST AWARD: THREE LEAVES

- ITC Ltd, Bhadrachalam
- JK Paper Ltd, Odisha
- BILT Graphics Papers Ltd, Pune
- Tamil Nadu Newsprint & Papers Ltd, Karur
- Harihar Polyfibres, Haveri
- Ballarpur Industries Ltd AP Rayons, Warangal

2005

CEMENT SECTOR

HIGHEST AWARD: FOUR LEAVES

- Madras Cement Ltd, Alathiyur

2012

IRON & STEEL SECTOR

HIGHEST AWARD: THREE LEAVES

- Ispat Industries Ltd, Raigad
- Essar Steel Ltd, Hazira
- Rashtriya Ispat Nigam Ltd, Vishakhapatnam

2015

THERMAL POWER SECTOR

HIGHEST AWARD: FOUR LEAVES

- Calcutta Electricity Supply Corporation, Budge Budge
- JSW Energy Ltd, Toranagallu
- Tata Power Company Ltd, Trombay
- JSW Energy Ltd, Ratnagiri

*In each rating, plants are assigned a numerical score from 0 to 100. Plants are awarded symbolic 'Green Leaves', depending on what their score is. Five leaves are awarded for scores of 75 and above, four for 50-74, three for 35-49, two for 25-34, one for 15-24 and none for 14 and below. The GRP scores are based on an evaluation of the plant's life-cycle environmental impacts, from the sourcing and processing of raw materials to the manufacture, use, and disposal of products. The evaluation includes impact on communities living around the plant.

IT'S A RECOGNITION

HOW COMPANIES HAVE BENEFITTED

CSE worked with companies in each sector and helped them reduce their resource consumption and pollution footprint. The environment managements in these companies registered considerable improvements, as a result. While business became more sustainable, environmental regulation in these sectors also improved.

PULP AND PAPER

- Pulp and paper companies realised how large volumes of water consumption affects the business sustainability. The ratings of the sector guided the companies to reduce their water consumption by nearly three-fourth from 200 cubic metre/tonne in 1999 to 68 cubic metre/tonne paper in 2013.
- Elemental chlorine bleaching was found to be a major pollution burden. Therefore a majority of the companies started adopting an elemental chlorine-free bleaching process. The chlorine use reduced from 69 kg/tonne of virgin fibre bleached pulp in 1999 to 19 kg/tonne of virgin fibre bleached pulp in 2013.
- The fibre material sourcing pattern leapfrogged. The companies adopted reliable and sustainable raw material sourcing from farm forestry instead of being dependent on government forests.

AUTOMOBILE

- The automobile sector rating led the Mashelkar Committee to propose a roadmap for Euro-based emission norms for automobile fuel use in India. The committee recommendations became part of India's first National Auto Fuel Policy, 2003.
- The companies voluntarily came forward and submitted their emission certificates for public disclosure—a move unheard of even in the developed world.

CHLOR-ALKALI

- Use of membrane cell-based technology was promoted instead of mercury use as process catalyst. The ministry of finance, Government of India, offered a subsidy, cutting down customs duty from 15 per cent to 5 per cent, for import of membrane cell technology.

- The Alkali Manufacturers Association of India signed the Corporate Responsibility for Environmental Protection, a voluntary agreement with then Union Ministry of Environment and Forests to completely phase out mercury cell process by 2012.

CEMENT

- The Indian cement sector was recognized as an efficient and one among the global best in energy use and GHG emission control. The perception of this industry (as a polluting one) changed.

IRON AND STEEL

- Rashtriya Ispat Nigam Limited adopted the recommendations of the rating and installed a reverse osmosis plant to recycle and reuse its wastewater.
- Steel Authority of India Limited followed the rating recommendations and included them in its expansion and modernisation plan. The steel giant organised a sensitisation workshop for its senior officials across the plants on the GRP findings and recommendations for improvement.

THERMAL POWER

- Tata Power Limited developed and implemented a strategic plan for performance improvement based on the rating recommendations. Similarly, JSW Energy Limited organised a sensitisation workshop for its senior officials on GRP findings and recommendations for improvement.
- The Thermal power sector rating led to introduction of new emission norms for sulphur dioxides, oxides of nitrogen and mercury. Water consumption by the sector was brought into the regulatory purview for the first time.

HOW CAN YOU PARTICIPATE

The companies shortlisted for the rating are invited to voluntarily participate in the GRP. The companies have to send their consent for voluntary participation.

GRP is free and does not charge any fee for participation.

All the selected companies are rated irrespective of their voluntary participation or non-participation. The voluntary participation has advantages since the companies can share the accurate information with GRP and their viewpoints are better understood.

The participating companies are required to fill the GRP questionnaire and facilitate plant visits for the survey team.

Highly confidential data such as those related to finance, patented technology etc. which are shared with GRP are not disclosed.

Each company needs to provide feedback on the Company Environment Profile before it is released.

BE A PART OF THE RATING. PARTICIPATE VOLUNTARILY

IRON & STEEL SECTOR RATING, 2012

We appreciate your Green Rating Project which is indeed a valuable and landmark endeavour. We would once again like to assure that SAIL is making continuous efforts for environment protection under its commitment towards Sustainable Development. We look forward to discussing with you and your team about our environmental performance and plans for further improvement in the area.

— ARUN JOT MALHOTRA, SAIL

THERMAL POWER SECTOR RATING, 2015

I am delighted that the CSE has recognised JSW Energy's Vijayanagar and Ratnagiri plants for best practices in environment management. At JSW, conserving the environment and limiting the impact of our industrial processes on the surroundings, command the same importance as P&L targets. It, therefore feels good when our efforts are recognized.

It is imperative for all of us to remember that while we may or may not be directly impacted by any kind of waste pollution, but someone somewhere is paying for it. As the Centre for Science and Environment rightly promulgates, companies must adopt sustainability and environment management practices as a routine part of their business and not merely to satisfy prescribed norms.

— SANJAY SAGAR, JSW



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