New Delhi, June 4 -- Indian industry may not be as green as it claims. A new Centre for Science and Environment (CSE) report on eve of the World Environment Day claimed that iron and steel industry - big consumers of energy - are lagging behind in efficiency compared to their global peers.

Domestic steel industry is consuming 50% more energy compared internationally and using three times more water, the CSE said, releasing its two-year-long study. Many of the top Indian iron and steel companies evaluated failed to meet air quality norms. That was the apparent reason that a maximum score obtained by an Indian company on a rating of 100 was just 40. In some cases, it was as low as two or three. In all, 21 companies of the sector were evaluated in a comprehensive green evaluation.

"For us, this rating has come as a bit of shock. We ourselves are shocked with the scale of non-compliance. This sector has the ability to fix it as it has money. But, instead of seeking better environmental performance we are now seeing a down slide," CSE director general Sunita Narain said.

The steel sector in the country is producing 75 million tonnes (MT) per annum on about 75,000 ha of land or about 1,000 ha for a million tonne plant, while the global best practice is to have 200 ha for a similar capacity unit.

State-owned SAIL was ranked among the lowest. Its best performing plant could occupy the 11th spot on list of 21.

However, SAIL disagreed with the findings.
RINL along with two other companies (Ispat Industries and Essar Steel) bagged the prestigious award with "3 Leaves rating" out of 5 leaves.

Rashtriya Ispat Nigam Limited has received the prestigious Green Rating Award based on assessment done by Centre for Science and Environment (CSE) for achieving several benchmarks on energy use, resource consumption, and environmental performance.

The award was received from Union Minister of State for Environment Jayanthi Natarajan by RINL Chairman-cum-Managing Director A.P. Choudhary at a function organised in New Delhi on Monday evening.

RINL along with two other companies (Ispat Industries and Essar Steel) bagged the prestigious award with “3 Leaves rating” out of 5 leaves.

The CSE recognises the good performance as under: Above 75 per cent - 5 Leaves Award, 50-75 per cent - 4 Leaves Award, 35-49.9 per cent - 3 Leaves Award, and 25-34 per cent - 2 Leaves Award and 15-24.9 per cent - 1 Leaf Award. Green Rating Project (GRP) is India's only public disclosure project in which environmental performance of companies within a sector is assessed and made public. The process followed by GRP is rigorous, independent and participatory.

The GRP of the Indian iron and steel sector is being organised by the CSE. The award is instituted by CSE based on the detailed information obtained from the plant and their team visit to the industry, feedback from NGOs, Pollution Control Board and other stakeholders. Assessment of the industry is done by a technical advisory panel, comprising experts from the steel industry and other areas.

After receiving the award, Mr. Choudhary said in this era of high volatility and steep rise in input materials for the steel industry, the “green rating” had come as a shot in the arm for RINL, a Navratna company, which had all along banked heavily on its eco-friendly technologies to improve its bottom line in spite of not having captive mines for iron ore and coal.

In fact RINL's environmental measures contribute in reducing our steel manufacturing cost by a whopping 17 per cent, he added.

Mr. Choudhary pointed out that the commitment for environment was made at the design-board-stage when Vizag Steel's designers and engineers gave high priority for maintaining the pristine quality of the environment.

RINL Director (operations) Umesh Chandra was present on the occasion.
On World Environment Day, Sunita Narain, director, Centre For Science and Environment (CSE) tells CNBC-TV18 that with progress, industry has shoved environment to the sidelines according to the findings of a CSE report.

Below is an edited transcript of the interview on CNBC-TV18. Also watch the accompanying video.

Q: You believe that environment picture look much better in 2005 and that’s when Indian industry was actually getting on board with being environmentally and in managing the environment. Why has the picture deteriorated in 2012?

A: In 2005, we rated the cement sector, which is an equally polluting, growth and a sunshine sector. According to our assessment the cement sector has actually shown remarkable improvement in environmental performance and we believe that environment has therefore somehow got mainstreamed into Indian industry.

Q: Why do you believe that it’s not the case in 2012? Do you believe that industry should be incentivised for going green?

A: Absolutely not. In steel sector, CII’s demand should be outright rejected by the government. Here is a steel sector, which is actually profitable. The companies which we have rated poorly are making good money because they have low cost of low materials, energy and yet they have terrible compliance record.

We are showing that they are not even complying with the minimum national standards as far as environment is concerned. According to our study three companies that we have rated higher are still average, are those companies higher which had to pay huge amounts for raw material as they don’t have captive mines and huge amounts for energy.

Therefore, their gains on environment are incidental as they had to invest in efficiency just for the sheer sake of economics.

Q: You mean that the government should not follow the carrot and the stick approach. It should drop the carrot altogether and wheel the stick?

A: Correct. As per our study, the industry is doing what it does for the environment, and which is incidental for economic reasons. The reason for deterioration from 2005-2012 is due to weak regulatory system. A visit to some steel companies showed that there was no monitoring, vigilance, scrutiny and policy drivers in all cases.

Q: Is it fair to extrapolate from the experience that you have had with the steel and the iron industry to say that everybody whether it’s the auto industry or FMCG companies is doing a bad job of managing the environment. Can you extrapolate this for everybody in business?

A: Firstly, we are talking about the iron and steel sector. The entire nation which believes that the iron and steel sector is engaged in green production is not true and we are standing behind our study.

But, for rest of the sectors, we are saying two things and that applies universally. There is no reason for us to believe that there is a correlation between the information that companies are putting out and their actual performance as there is no data in the public domain which is looked by regulators.
It is a fair assessment which companies must understand today. It's easy to talk about being green without being able to prove that you are green. To prove that one is green one need a regulatory support.
Steel industry doesn't follow environment norms, says CSE study
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The poor environmental performance of the iron and steel sector is a measure of the failure of the regulatory institutions in the country. Nobody is measuring and monitoring its actual performance, says CSE.

While the iron and steel sector is known as the back-bone of the Indian economy, having made a substantial contribution to growth, it also among the worst industries when it comes to complying with environmental norms, reveals an analysis by Centre for Science and Environment (CSE), a Delhi based NGO, released on Monday.

CSE’s Green Rating Project (GRP) analyzed 21 top steelmakers in the country and found that the sector has not been complying with even the weak environmental norms and getting away easily due of lax regulatory and monitoring capabilities.

Bhushan Steels (Dhenkanal, Orissa), Monnet Ispat and Energy (Raigarh, Chhattisgarh), Jayaswal Neco Industries (Raigarh, Chhattisgarh), Steel Authority of India (SAIL)-Bhilai, Durgapur, Bokaro and Burnpur; Welspun Maxsteel (Raigad Maharashtra) were found to be the worst performers under the GRP.

The GRP analyzed 21 companies from iron and steel sector with over 0.5 million tonnes of annual capacity on more than 150 parameters including technology, process efficiency, pollution, occupational health and safety and compliance, etc. The project spanned over the period of two years.

While the overall sector received a 19% GRP mark, only three companies of the total 21 scored over 35% marks and were termed as ‘average’ under GRP. They were Ispat Industries, (Raigad, Maharashtra), Essar Steel (Hazira, Gujarat) and Rashtriya Ispat Nigam (RINL or Vizag Steel from Visakhapatnam).

The CSE also pulled up public sector major SAIL for non-transparency and non-compliance. Only SAIL Rourkela participated, while SAIL Bhilai, Durgapur, Bokaro and Burnpur did not participate. They were rated on the basis of available information and were found to be poor in meeting the norms.

However, according to media reports SAIL has rejected the CSE’s findings. Sunita Narain, director general, CSE says that, “On the eve of World Environment Day, the steel sector rating is a reminder of the challenges, but also the enormous potential of bringing about change.”

She adds, “The poor environmental performance of this sector is a measure of the failure of the regulatory institutions in the country. Nobody is asking this sector to improve its green bottomline. Nobody is measuring and monitoring its actual performance. We should not be surprised.”

The GRP rating exercise also found that that the iron and steel sector’s energy consumption of 6.6 GCal/tonne is about 50% higher than the global best practice and their process water consumption, excluding power generation, townships and other downstream operations, is a high 3.5 m3/tonne—over three times the global best practice.

“The large-scale plants were found to be highly wasteful on land. They have close to 1,200 hectares (ha) of land per million tonne of installed capacity; a well-designed plant does not need more than 200 ha. If all the residual land with steel plants were to be properly utilised, the industry can produce more than 300 million tonnes steel, not the 75 million tonnes it is producing today. In fact, the steel industry will not need extra land till 2025,” CSE found.

Chandra Bhushan, CSE’s deputy director general and head of the Green Rating Project, points out, “The iron and steel sector’s score is the lowest compared with the other sectors
that the GRP has rated previously. In fact, the steel sector not only has the worst pollution compliance record, it was also found to be highly non-transparent and poor on information disclosure."

He further said, “The future road map for the sector is clear. It will have to reduce its ecological footprints drastically, invest in health and safety of its workers and treat local communities as stakeholders and beneficiaries.”
Unending concerns expressed about deteriorating environmental condition and global warming seem to have no bearings on corporate majors as a latest rating report published by the Centre for Science and Environment (CSE) has found steel companies the worst performer.

Three companies from Jharkhand covered under the Green Rating Project (GRP) have also performed dismally on various environmental norms.

Tata Steel Limited, Jamshedpur has topped among the steel companies from the State with 33 per cent score in the list that comprises 21 companies from all over the country. The company has been awarded with ‘two leaves’, the rating based on the percentage of score. The CSE gives ‘five leaves’ rating to those who score 75 per cent on various environmental norms.

The organisation based on its study and research has found solid waste disposal practices, wastewater discharge, air pollution from some operations and local community perceptions on environmental performance at their lows.

Though on the higher side the steel major has advanced technology in newer plants, lowest specific energy consumption and solid waste disposal among plants using blast furnace technology and best safety performance at its Jamshedpur plant. Tata Steel of Jamshedpur was at the fifth spot. Ispat Industries of Raigadh Maharashtra has fared the best with 40 per cent score line.

Other two plants based in Jharkhand are Usha Martin, Jamshedpur with just 15 per cent score and ‘one leaf’ and SAIL, Bokaro with meager 7 per cent and went leave-less. Usha Martin plant has been found with some positives such average blast furnace productivity and blast furnace slag sold to cement plants but collected hardly any laurels on solid waste management, air pollution, housekeeping and safety norms.

GRP is an effort to rate industrial units within a specific sector on the basis of their environment friendliness and aims to encourage companies for adopting better environment management practices. Dismal show here is more worrying as India is world’s fourth largest steel producer with demand for iron and steel growing by leaps and bounds. The rating has found the sector highly polluting and is categorised as one of the most polluting sector among 17 sectors identified by the Central Pollution Control Board.

The CSE in its observation says the industry is struggling to meet environmental norms that would have implications on expansion plans of this core sector. If performance remains as poor, then growth will come at the cost of environment, it adds. GRP is a 15-year old and the only public disclosure programme of its kind in the country. It has already rated automobile, paper, chlor-alkali and cement sectors before steel.
Indian iron and steel sector consumption 50% higher than global best practice

India's leading iron and steel companies, scored averages at best in Centre for Science and environment green rating test. The Indian iron and steel sector's energy consumption of 6.6 GCal per tonne, is 50 per cent higher than the global best practice.

Its water consumption (excluding power generation, townships and other downstream operations) is thrice as high. Most steel plants were found to be non-compliant with pollution norms.

This is a result of a two year long exercise covering 21 steelmakers of over 0.5 million tonnes of annual capacity each. According to Sunita Narain, director general, CSE, “The poor environmental performance of this sector is a measure of the failure of the regulatory institutions in the country. Nobody is asking this sector to improve its green bottom-line. Nobody is measuring and monitoring its actual performance.”

Interestingly the report finds large plants to have close to 1,200 hectares (ha) of land per million tonne of installed capacity, whereas claims CSE a well-designed plant needs not more than 200 ha per million tonne.

With its existing land area, the sector could ideally produce 300 million tonnes instead of todays 75 million tonnes and should not need extra land till 2025, says CSE

Topping the charts nonetheless are, Ispat Industries (now JSW Ispat ) in Maharashtra, Essar Steel in Hazira, Gujarat and state owned Rashtriya Ispat Nigam Limited in Visakhapatnam, Andhra Pradesh. Their scores of three of five leaves count as average in the green rating exercise.

The sector as a whole took just One leaf, scoring just 19 per cent. The cement sector in comparison had back in 2005 earned 36 per cent and Three Leaves.

In the past, CSE green rating programme has scrutinised the automobile, paper, chlor-alkali and cement sectors. For this, the key fifth sector, CSE has also offered solutions for improvement.

Tata Steel, Jamshedpur took the fifth spot. Naveen Jindal led Jindal Steel and Power, in Raigarh the ninth. And plants of the country's largest steelmaker, Steel Authority of India were found be non-transparent and non-compliant, not participating voluntarily. The only exception was SAIL Rourkela whose participation earned it a One Leaf.

"The iron and steel sector's score is the lowest compared with the other sectors that GRP has rated previously. In fact, the steel sector not only has the worst pollution compliance record, it was also found to be highly non-transparent and poor on information disclosure," said Chandra Bhushan, who heads CSE,s Green Rating Programme.
The Centre for Science and Environment, a non-government organisation based here and promoting sustainable development, on Monday exposed major inefficiencies in the performance of India's iron and steel sector.

In a detailed rating, which took two years to compile, of the country's 21 top steel makers, it found a general inefficiency in resource usage, widespread pollution and violation of environmental norms, among other deficiencies.

The companies, each having at least 500,000 tonnes of annual manufacturing capacity, were rated on 150 parameters, such as technology, process efficiency, pollution, occupational health and safety, and compliance with regulatory norms.

Among the worst performers were Bhushan Steel's Dhenkanal plant, Monnet Ispat and Energy Ltd and the IISCO Burnpur plant of public sector steel major SAIL.

The relative best performers (their overall rating on the CSE scale was 'average') included the Vizag steel plant of Rashtriya Ispat Nigam Ltd, Essar Steel's Hazira plant and Ispat Industries' Raigad plant.

"The poor environmental performance of this sector is a measure of the failure of the regulatory institutions in the country.

"Nobody is asking this sector to improve its green bottom-line. Nobody is measuring and monitoring its actual performance," said Sunita Narain, director-general of CSE.

According to CSE, the steel sector's energy consumption of 6.6 Giga Calories per tonne of output is 50 per cent higher than the global best practice. Process water consumption was 3.5 cubic metres per tonne, over three times the global best practice.

"The large-scale plants were found to be highly wasteful on land.

"If all the residual land with steel plants was to be properly utilised, the industry can produce more than 300 mt of steel (annually) and not the 75 mt it is producing today.

"Most steel plants were found to be non-compliant with pollution norms," it said.

Narain also pulled up SAIL for refusal to make efficiency disclosures.

"In disclosures, SAIL has been severely wanting. The company is not willing to share even basic information in a sector that is grossly inefficient," she said.

The comment immediately drew an angry response from the government-owned steel maker, which rejected the accusation.

"Every month, we are sending information on our performance to pollution control boards which are the statutory authorities for seeking information," a senior official from the company told Business Standard.

He added that SAIL had informed CSE that assessing the environmental performance of SAIL's integrated steel plants might not be appropriate, as they were in a transitional phase of modernisation and expansion.
While SAIL claims it is investing close to five per cent of its total expenditure on modernisation of Rs 75,000 crore (Rs 750 billion), CSE said SAIL’s plants were found to be non-transparent and non-compliant in general.

Only its Rourkela plant participated in the rating programme while the rest -- Bhilai, Durgapur, Bokaro and Burnpur -- would not.

Hence, they were rated on the basis of available information and were found to be poor, CSE said.

Monnet Ispat, rated second-last, also said it was an environment-conscious company. "We are very clear that we are meeting all performance standards.

"In case there has been any technicality that has been overlooked by us, the company is willing to rectify it," Sandeep Jajodia, chairman and managing director, told Business Standard.

Tata Steel [ Get Quote ] of Jamshedpur was at the fifth spot, while Jindal Steel and Power of Raigarh was ranked ninth.

Overall, Narain expressed surprise on the finding that the average performance of the sector, on all parameters put together, was as low as 19 per cent.

Environment and Forests Minister Jayanthi Natarajan and Planning Commission member Arun Maira were present at the release of the ratings.
Former power and finance secretary EAS Sarma says that the Vishakhapatnam Steel Plant continues to release toxic pollutants because the state pollution control board is not taking any action

Former power and finance secretary EAS Sarma has said that due to inaction from the Andhra Pradesh Pollution Control Board (APPCB), the Visakhapatnam Steel Plant (VSP) is continuing to spew out pollutants into Appikonda Vagu that drains into the sea.

Mr Sarma, in a notice sent to Ravi Chandra, member secretary of APPCB, said,"...the toxic pollution caused by VSP is adversely impacting traditional fishing activity in the sea adjacent to the plant. APPCB which is the statutory authority to enforce the relevant environment laws has not cared to proceed against VSP".

"If anyone can visit the Appikonda Vagu and see the black colour of the water and its turbidity, he or she will understand how VSP is releasing effluents in a highly undesirable manner. The confluence of the stream with the sea has changed the colour of the sea water, discouraging traditional fishing which used to take place in the past," said Mr Sarma, who is also the convener of the Forum for Better Visakha (FBV).

According to the former power and finance secretary, the Centre for Science and Environment (CSE), has given a poor environmental rating to the steel industry in general and to VSP in particular. CSE has also observed that VSP's poor record in containing pollution is primarily on account of APPCB's inaction, he said.

In his previous letter sent on 1 February 2011 to the then member secretary of APPCB, Mr Sarma said that the Visakhapatnam chapter of the Indian National Trust for Arts and Cultural Heritage (INTACH) had collected a sample of water from the channel draining waste water into the sea from VSP near Appikonda village. Here are the results of the lab testing:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.21</td>
</tr>
<tr>
<td>Suspended Solids (105 degrees C)</td>
<td>683.00 mg/litre</td>
</tr>
<tr>
<td>Dissolved Solids (105 degrees C)</td>
<td>1380.00 mg/litre</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>180.00 mg/litre</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand</td>
<td>42.00 mg/litre</td>
</tr>
<tr>
<td>Oil &amp; Grease</td>
<td>4.00 mg/litre</td>
</tr>
<tr>
<td>Chromium</td>
<td>0.014 mg/litre</td>
</tr>
<tr>
<td>Lead</td>
<td>1.255 mg/litre</td>
</tr>
<tr>
<td>Nickel</td>
<td>ND</td>
</tr>
</tbody>
</table>

According to Mr Sarma, the presence of lead in the waste water is worrisome, as the place where this water joins the sea is a site used by the local fishermen for fishing. Lead ingested fish can cause carcinogenic diseases. An independent water sample analysis carried out at this site not only confirmed the presence of lead and other solid pollutants, especially the presence of chromium, nickel and copper. I am not sure whether VSP's waste treatment plant is fully operative, he said.

Earlier in September 2001, the former secretary to the government of India sent a letter to the secretary in the ministry of environment and forests, complaining that the state level APPCB has neglected its responsibility to conduct public hearings on the basis of these environment assessment reports, apparently because officials have vested interest.
Steel isn’t green
Better regulation of the sector is needed

The environmental performance of the Indian iron and steel industry is poor, according to the latest indices released by the Green Rating Project of the Centre for Science and Environment. On a scale of 10 (the theoretical best), the global best practitioners score eight, while the Indian leaders score only two. The steel industry, if it chooses to ignore this index, will be an outlier. The paper industry, which is the only one to be rated twice, sharply improved its participation and performance the second time around. The report on the auto industry was followed by the industry changing outsourcing practices, which pushed polluting practices over the factory boundary wall. In the case of the chlor-alkali industry, in the post-report period the use of mercury has been almost phased out. Perhaps the best learner has been the cement industry, which has now almost matched global practices in energy use and greenhouse gas emission. Yet the signs of equivalent seriousness from the iron and steel industry are not promising: as many as eight of the top 21 units of the iron and steel industry covered under the project have not participated in the report exercise.

It is fascinating who has done well and who has done poorly. The top three companies have worked against economic costs since, in the absence of having captive mines, their energy costs are higher. Thus, the driver for better environmental performance is economic. This is because better technologies exist, and those that have done well have been paying to use them. But since the regulatory compulsion to improve environmental performance is lacking, the non-performers have been making good profits in an uncaring manner. In the past, the more enlightened leaders of the cement industry have argued that if you do not make achieving environmental benchmarks mandatory, then the good guys will suffer. So what the government has to do is improve policy and regulatory performance. Particularly problematic in that respect is the fact that most state pollution control boards have been lax in their monitoring activity. The environmental clearance system has also to be improved to include road maps for achieving existing global benchmarks by using appropriate available technologies.

The company that has come out on top is Ispat Industries, Raigad. It is followed by Essar Steel, Hazira, and Rashtriya Ispat Nigam, popularly known as Vizag Steel. Tata Steel, in spite of its considerable reputation for social consciousness, has been rated fifth. Most of the giant plants of Steel Authority of India Limited did not cooperate with the report; the exception was Rourkela Steel Plant. In spite of that, the report managed to cover companies that account for 68 per cent of the industry’s installed capacity and production at specific plants. The specific aspects looked into are iron and steel making, raw material handling, resource use (water, specific energy and land), pollution and environment management systems. The report has focused on performance, taking care to be technology-agnostic and comparing only like for like. In iron making, Essar Steel leads; in steel making, it is JSW Steel; and in overall performance, it is Vizag Steel. Perhaps the most telling finding is that if the land already available with the steel leaders is properly used, all the controversy over land for new capacity would disappear.