Jindal Steel & Power Limited (JSPL) features amongst the largest steel manufacturers in India and the world. Since its existence, JSPL has always abided by its promise to the nation of generating value for all its stakeholders. This business sustainability report is a reflection of JSPL’s commitment to ensure not just speed but also authentic and holistic growth of the organization.

This report is our first sustainability report and is prepared on the basis of the latest version of guidelines on sustainability reporting (G4) developed by Global Reporting Initiative (GRI). The disclosures presented in this section are in alignment with the core Generation4 (G4) criteria. Based on the materiality assessment conducted in-house, information on ten aspects has been disclosed.

JSPL is committed to an annual reporting of its performance on sustainability issues and sharing it with all its stakeholders. We welcome you to share your opinion, ideas, suggestions and feedback with us at miniya.chatterji@jindalsteel.com.

Data management approach

Although this is our first sustainability report, we had already worked on developing systems to compile, monitor, and report on sustainability indicators. Relevant information and data, for this report, has been collected from the concerned departments of facilities located across our operations and reported to the Business Sustainability Team. In order to automate sustainability data management exercise, we are in the process of implementing Sustainability Performance Management software, for the purpose of collecting and managing sustainability related data from different units spread across India, Oman and South Africa. However, during the data collection process we did face certain challenges such as data collection and management systems, data quality and extent of collection which we have also included in the report and will be improved for the next reporting cycle.

The assumptions and standard calculation methodologies for estimation and quantification of data that have been used are mentioned alongside the data.

In order to complement the data provided and to provide a balanced perspective of our performance, we have also discussed our key accomplishments, developments, and initiatives made during the reporting year.

Report Scope and Boundary

The report includes the following operations of JSPL (and its subsidiary Jindal Power Ltd.):-

1. Angul Integrated steel unit
2. Barbil Iron ore pelletisation unit
3. Dongamauha Captive power plant
4. Kiepersol, South Africa Underground coal mine
5. Shadeed, Oman Integrated steel unit and gas based HBI unit
6. Patratu Steel
7. Raigarh Steel and cement unit
8. Raipur Heavy machinery unit
9. Tamnar (JPL) Power plant
10. Tensa Iron ore mine

Assurance

This sustainability report of JSPL has been assured by an external third party. We would aim to continue this practice of getting indicators externally assured to help improve our processes and data management mechanisms.
“Sustainability at Jindal Steel and Power Ltd. means ensuring the organization’s holistic growth with authenticity, such that we are able to ensure our organization’s long term success as well as contribute significantly towards building a better world.

The steel, power, and infrastructure industry itself plays a direct role in building the Nation. Further, as you will read in this report the boundaries of Jindal Steel and Power Ltd.’s concern and action go far beyond the peripheries of our business and site locations. I believe that business sustainability lies in doing business ethically with resilience and despite the odds, where we care for all stakeholders and also as responsible corporate citizens make a substantial contribution to actually solve global challenges, in a way that is rooted in a genuine interest in building a more sustainable world.

I invite you to read our 1st Business Sustainability report that lays out with plenty of examples the core identity and ethos of Jindal Steel and Power Ltd. I would be glad to receive your comments and participation in our ongoing work.”

- Naveen Jindal
Chairman, Jindal Steel and Power Ltd.
Dear Stakeholders,

I am happy to present to you Jindal Steel and Power’s (JSPL) 1st Business Sustainability Report. This report covers all matters related to JSPL’s business sustainability for the Financial Year 2013-14 and is a reflection of our commitment to you towards ensuring JSPL is on a path of holistic and authentic growth, such that we continue to be an admired global industry leader in the long term.

JSPL’s 1st Business Sustainability Report presents to you what sustainability means at our company. It maps out JSPL’s materiality framework analysing in detail what is important to our stakeholders and to our business. The Report offers a data backed explanation of how our business model, business processes, and our steel and power production process is sustainable. It then goes on to emphasize how our social commitment lies not just within the boundaries of our operations but also much beyond it. We have also prepared for you 5 case studies that I am certain will make for an interesting read. Each case study is an in-depth example of a unique and innovative aspect of JSPL’s commitment to sustainability. The Report is prepared on the basis of the latest version of guidelines (G4) developed by the Global Reporting Initiative.

I take this opportunity to also add that since our company’s inception, we have consistently been engaged in efforts around ensuring sustainability of the company and its stakeholders. These efforts have evolved over the years to now take a highly sophisticated approach to sustainability within JSPL. In 2014 we created a Business Sustainability division that includes the erstwhile Energy and Climate Change department, besides being a central node coordinating various departments at JSPL that are related to the company’s business longevity. Sustainability Officers have been placed at all JSPL site locations. A newly appointed Chief Sustainability Officer reports into the Group CEO for all matters, reports to JSPL’s Chairman on matters related to JSPL’s social commitment, and has a dual function to be also part of the Group CEO’s Office. This unique organizational set up ensures that sustainability is embedded into the core of JSPL’s business. This is important as regulators are emphasizing on it, employees are expecting it, investors are asking for it, and customers can be served better with it.

The business environment and regulations in which JSPL operates is changing, our work culture is fast evolving, and our pace of growth continues. Focusing on business sustainability ensures that we have our finger on the pulse of these tremendous changes, such that while we leapfrog on the opportunities that change always offers, we ensure that JSPL’s growth path remains holistic and indeed authentic.

Sincerely,

Ravi Uppal
Dear Stakeholders,

Jindal Steel and Power Ltd. has been a progressive company led from the front by young leadership ever since its inception 25 years ago. This $3.3 billion company’s gross assets have grown at a 5-year CAGR of 31.46%. Our global footprint has grown to Oman, South Africa, Mozambique, Australia, and Indonesia in 7 years. We have invested in plenty of innovations and we have created pioneering technologies such as erecting an environment friendly Coal Gasification plant for Direct Reduced Iron for the first time in India, all in a span of 3 years. We thank you, dear Stakeholders, for your partnership in this spectacular growth journey.

Given the company’s fast paced growth as well as a rapidly changing industry landscape especially in India, it is imperative to ensure that the company is also a winner 25 years from now. With this in mind Jindal Steel and Power Ltd.’s Business Sustainability division was set up in 2014, to ensure that Jindal Steel and Power Ltd.’s growth is speedy as well as holistic and authentic in the long term.

A strong sponsorship from Jindal Steel and Power Ltd.’s top management towards prioritizing that the Company stays on the path of holistic and ethical growth has ensured that the work of the Sustainability Division is entrenched right at the core of our business. This has enabled the Sustainability Division’s efforts to be focused on quickly rolling out action, setting the organizational focus on ‘Innovation, Nation Building, and Social Commitment’ in every country where Jindal Steel and Power Ltd. has its production sites, as well as establish the Sustainability Division’s action priorities as follows – to ensure legal compliance, ascertain Jindal Steel and Power Ltd.’s raw material security, establish sustainable steel and power production, introspect and build the company’s authentic corporate identity and brand, catalyse innovation, attract and nurture diverse top talent in the company, maintain robust internal processes, develop a positive mind set of employees to innovate and be dynamic, and tangibly lead as an organization on a few critical issues that would greatly improve the state of the world.

We are delighted to present to you Jindal Steel and Power Ltd.’s 1st Business Sustainability Report FY 2013-14. I would like to thank my team of Sustainability Officers as well as all collaborators across the company for helping us to produce this in-depth report. It is a detailed and data backed review of Jindal Steel and Power Ltd.’s commitment to business sustainability over the period of April 2013 to March 2014. We hope that you will enjoy reading it.

Sincerely,

Miniya
Jindal Steel and Power Limited (JSPL) has a dominant presence in steel, power, mining and infrastructure construction sectors, as a US $ 3.3 billion global business conglomerate. It is driven by a strong philosophy of innovation and technological leadership in business as well as in its social commitment of population stabilization, education, and public cleanliness to ultimately build the Nation of our dreams.

JSPL is a part of the OP Jindal group and is a publicly listed company on the Bombay Stock Exchange and the National Stock Exchange. The company has committed investments exceeding US $ 30 billion in the future and has several business initiatives running simultaneously across continents.

JSPL today sports a product portfolio that caters to markets in power and across the steel value chain. During FY 13-14, our steel manufacturing capacity was 4.5 MTPA which was enhanced to 7.75 MTPA during FY14-15. This also includes the steel mill plant of 1.6 MTPA in Patratu, Jharkhand, which manufactures wire rods and TMT Rebars. Also, it has set up a 0.6 MTPA wire rod mill and a 1 MTPA capacity bar mill at Patratu, Jharkhand, a medium and light structural mill at Raigarh, Chhattisgarh and a 1.5 MTPA steel melting shop and a plate mill to produce up to 5.00-meter-wide plates at Angul, Odisha. JSPL has a dedicated workforce of over 8,000 people.

Focussed on innovation and technology leadership in the industry, Jindal Steel and Power operates the largest coal based sponge iron plant in the world, and sports a large product portfolio that includes the world’s largest 121 meter rail, and has invested in pioneering energy efficient environment friendly technologies such as building in India the world’s first DRI plant via Coal Gasification.

During the year, we enhanced our power capacity to 4,485 MW through expansion in captive power generation as well as independent power generation. We commissioned three units of 600 MW each in JPL at Tamnar, in a record time creating a new industry benchmark. The fourth unit will be commissioned by October 2014, taking our independent power generation capacity to 3400 MW. Earlier, we had installed India’s First Mega Power Project of 1000 MW in private sector at Tamnar, Chhattisgarh. This was taken up by our subsidiary – Jindal Power Ltd.

JSPL has been rated as the second highest value creator in the world by the Boston Consulting Group in 2010, the 11th fastest growing company in India by Business World and has figured in the Forbes Asia list of Fab 50 companies. It has also been named among the Best Blue Chip companies and rated as the Highest Wealth Creator by the Dalal Street Journal. Dun & Bradstreet has ranked it 4th in its list of companies that generated the highest total income in the iron and steel sector.
Our Steel Products

Rails and Head Hardened Rails

JSPL is manufacturing world’s longest 121 meter long track rails, with a facility to factory weld in lengths of up to 480 meter. JSPL has bagged the first order of long rails for the Dedicated Freight Corridor Project. The Company will produce long rails upto 260 metres in length and beyond.

These rails will be transported in customised rakes, enabling safer and faster rail travel through sharp reduction in welding joints across tracks.

JSPL has also set up a state-of-the-art online Rail Head Hardening facility for the first time in the industry, which is a game-changing initiative in the rail industry. These head hardened rails are currently imported from Europe and Japan for use in upcoming Metro Rail projects in various cities.

Jindal Quick Build Solutions

JSPL’s QuickBuild construction solutions include ready-to-use Cut & Bend Rebars and Weld Mesh. QuickBuild solutions bring the best quality in rebars, processed accurately through a superior and fully automated process. The use of our ready-to-use factory built rebars improves project execution. Similarly, the use of weld mesh eliminates activities, such as cutting, marking, spacing of rebars and binding with wires. We are delivering the products through market-based service centres.

Parallel Flange Beams and Columns

JSPL has pioneered the production of medium and heavy hot rolled parallel flange beams and column sections in India. These sections are cost-effective through savings in steel consumption and provide ultimate design flexibility to the structural designers. Wide product range is available from 180 mm to 900 mm. These are used in refineries, airports, flyovers, metro rail projects, shopping malls, power plants, stadiums, cement & steel plants and industrial sheds, among others.

Structural Steel

JSPL has the distinction of producing high strength angle irons in transmission line towers (TLT) market within India, meeting all major international standards. The demand for sheet piles has increased, especially for infrastructure projects.

The Company has fully utilised its state-of-the-art Rail and Universal Beam Mill at Raigarh to produce steel sheet piles (U-shaped) that conform to the highest quality standards. Moreover, we recently introduced Parallel Flange Bearing Pile sections and successfully produced W Sections of American ASTM series for the North American export market. These sections are available in mild steel and high tensile category, conforming to stringent quality norms.

Plates and Coils

JSPL has commissioned a superior quality Slab Caster with highest capacity and strength, for the first time in India. Therefore, we are well-positioned to offer heavy plates and coils in various value-added grades that were hitherto imported, making Indian industry self reliant. These find use in general engineering, structural fabrication, hi-tensile and micro-alloyed grades, pressure vessels and boilers, bridges and flyovers, corrosion-resistant applications, railway wagons, oil and gas pipelines and shipbuilding.

Speedfloor

JSPL has come up with revolutionary and innovative techniques to eliminate the outdated conventional flooring system, with suspended concrete flooring system known as ‘Jindal Speedfloor’.

Speedfloor is a light weight concrete / steel composite floor innovation that is easy to install and offers twin advantages of quicker construction and reduced consumption of concrete. An extensive range of joist depths and topping thicknesses that satisfies loading and fire requirements, offers contractors and end users an efficient and cost effective suspended concrete floor. It is perfect for multi-storey buildings and car parks.

Wire Rods

JSPL offers wire rods in 5.2 mm to 22 mm diameters from its first unit at the proposed 6 MTPA capacity integrated steel plant at Patratu, Jharkhand. The wire rods come with the promise of high quality and dimensional precision. The latest technology assures high degree of thermo-mechanical properties along with unparalleled dimensional accuracy, providing consistency of mechanical properties within a coil and from coil to coil. Therefore, the wire rods are the material of choice among wire drawers across the country. The mill is equipped with coil reforming technology which ensures that the coils are shipped with adequate care and reach customers with excellent coil stability without any damage.

Jindal Panther TMT Rebars

JSPL developed a new brand by the name of “Panther” for which the first product is the high-strength earthquake-resistant construction TMT rebars.
Rails
Parallel flange beams
Plates
Wire rods
Cut and bend rebars
Angles
Speed floor
Jindal Panther TMT rebars

Jindal Steel and Power
Reliable and economical power is crucial for India’s sustained development. Jindal Power Limited is one of India’s major power generation companies. JPL has set up the country’s first mega independent power plant in the private sector – a 1,000 MW capacity power project at Tamnar, Raigarh, Chhattisgarh. JPL has enhanced its operating capacity from 1000 MW to 2800 MW in 2013-14. JPL is also working towards implementing large hydro-power projects in India.

The Company has hydro-electric projects under implementation for the generation of 6100 MW of hydro-electricity in partnership with the Hydro Power Development Corporation of Arunachal Pradesh Limited (HPDCAPL).

In 2013-14, JPL featured among the top three thermal (coal / lignite based) stations for its Plant Load Factor (PLF) by the report released by the Operation Performance Monitoring Division of Central Electricity Authority (CEA).

For our captive coal mines, a 6.9 km conveyor pipeline has been set up for transportation of coal between the mines and the plant. The Company has constructed a 258 km, 400 KV Double Circuit transmission line from the plant to the PGCIL sub-station at Raipur through which power can be sold anywhere in India. For meeting the plant’s water requirement, an 18 m high dam over the Kurket River has been built about 25 kms away from the project site.

Jindal Power Limited - A Snapshot

Highlights, 2013-14

- Commissioned the three units of (4x600 MW) planned, in record time setting new benchmark in India’s energy sector
- Declared available for commercial operation Unit 1 and 2 of 600 MW capacity in March, 2014
- Synchronised Unit 3 of 600 MW capacity
- More than 25 MU energy saved by completion of new Energy Conservation projects
## Financial snapshot of JSPL (standalone basis)

<table>
<thead>
<tr>
<th>Component</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(on Standalone basis, for details please refer to Annual Report 13-14)</td>
<td></td>
</tr>
<tr>
<td><strong>Direct Economic value generated (₹ crore)</strong></td>
<td></td>
</tr>
<tr>
<td>Gross revenues from operations</td>
<td>16,324.46</td>
</tr>
<tr>
<td>Net revenue from operations</td>
<td>14,544.02</td>
</tr>
<tr>
<td><strong>Economic value distributed (₹ crore)</strong></td>
<td></td>
</tr>
<tr>
<td>Major operating costs¹</td>
<td>5477.37</td>
</tr>
<tr>
<td>Employee wages and benefits</td>
<td>552.32</td>
</tr>
<tr>
<td>Payments to providers of capital</td>
<td>1083.63</td>
</tr>
<tr>
<td>Community Investment</td>
<td>52.26</td>
</tr>
<tr>
<td><strong>Total capitalization (broken down in terms of debt and equity) (₹ crore)</strong></td>
<td></td>
</tr>
<tr>
<td>Net worth</td>
<td>13,041.41</td>
</tr>
<tr>
<td>Borrowings</td>
<td>24,369.24</td>
</tr>
</tbody>
</table>

1. Includes cost of materials consumed, purchase of stock in trade, change in inventories of finished goods, work in progress & stock in trade, and employee benefits expenses
2. Donations & CSR expenditure
### Net Income  `₹ in crore`

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>20,070</td>
</tr>
<tr>
<td>12-13</td>
<td>19,943</td>
</tr>
<tr>
<td>11-12</td>
<td>18,351</td>
</tr>
<tr>
<td>10-11</td>
<td>13,194</td>
</tr>
<tr>
<td>09-10</td>
<td>11,152</td>
</tr>
</tbody>
</table>

**For 2013-14**
JSPL's net income from operations increased marginally on account of moderate steel demand in India and globally.

### Operating Profit  `₹ in crore`

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>5,522</td>
</tr>
<tr>
<td>12-13</td>
<td>6,131</td>
</tr>
<tr>
<td>11-12</td>
<td>6,935</td>
</tr>
<tr>
<td>10-11</td>
<td>6,398</td>
</tr>
<tr>
<td>09-10</td>
<td>5,908</td>
</tr>
</tbody>
</table>

**For 2013-14**
JSPL's operating profit declined on account of escalating direct costs, primarily raw materials.

### Net Profit  `₹ in crore`

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>1,894</td>
</tr>
<tr>
<td>12-13</td>
<td>2,912</td>
</tr>
<tr>
<td>11-12</td>
<td>4,002</td>
</tr>
<tr>
<td>10-11</td>
<td>3,804</td>
</tr>
<tr>
<td>09-10</td>
<td>3,635</td>
</tr>
</tbody>
</table>

**For 2013-14**
JSPL's net profit declined due to a rise in depreciation and financial cost for our debt, to fund various expansion projects. These projects will progressively create value for all stakeholders in the long-term.

### EPS (annualised)  `₹`

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>20.53</td>
</tr>
<tr>
<td>12-13</td>
<td>31.13</td>
</tr>
<tr>
<td>11-12</td>
<td>42.42</td>
</tr>
<tr>
<td>10-11</td>
<td>40.22</td>
</tr>
<tr>
<td>09-10</td>
<td>39.05</td>
</tr>
</tbody>
</table>

**For 2013-14**
JSPL's earnings per share declined on account of a dip in profitability.
### Gross block ( ₹ in crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>63,056</td>
</tr>
<tr>
<td>2012-13</td>
<td>44,786</td>
</tr>
<tr>
<td>2011-12</td>
<td>35,802</td>
</tr>
<tr>
<td>2010-11</td>
<td>29,317</td>
</tr>
<tr>
<td>2009-10</td>
<td>21,109</td>
</tr>
</tbody>
</table>

### Net worth ( ₹ in crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>21,191</td>
</tr>
<tr>
<td>2012-13</td>
<td>20,105</td>
</tr>
<tr>
<td>2011-12</td>
<td>17,931</td>
</tr>
<tr>
<td>2010-11</td>
<td>14,088</td>
</tr>
<tr>
<td>2009-10</td>
<td>10,387</td>
</tr>
</tbody>
</table>

**For 2013-14**

JSPL’s gross block increased significantly by 41% owing to multiple completed expansions. The Company’s gross block is growing at a 5-year CAGR of 31.46%.

**For 2013-14**

JSPL’s net worth grew by 540% on account of escalated retained earnings. The Company’s net worth is growing at a 5-year CAGR of 19.51%.

### Dividend rate (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividend Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>150</td>
</tr>
<tr>
<td>2012-13</td>
<td>160</td>
</tr>
<tr>
<td>2011-12</td>
<td>160</td>
</tr>
<tr>
<td>2010-11</td>
<td>150</td>
</tr>
<tr>
<td>2009-10*</td>
<td>125</td>
</tr>
</tbody>
</table>

JSPL has focused on consistent return for shareholders and creating long-term value.

* Normalized on account of issue of bonus shares in the ratio of 5:1 during 2009-10.

### Composition of revenue (%)

- **82%** Domestic
- **18%** Exports

JSPL enjoys a balanced revenue mix. The Company is consistently entering new geographies to expand the export exposure business.

# For JSPL standalone
During the past few years, there have been numerous studies that have attempted to determine the definitive characteristics of the greatest organizations who have led their industry as trailblazers. None of these studies has produced a clear profile. Thank goodness. Organizations that lead are unique. They introspect and their unique corporate brand is established only on the basis of authenticity. They are true to what they are, and do not try to emulate another.

Innovation is intrinsically and deeply embedded in the DNA of JSPL, and so is the mission of Nation Building, along with a strong sense of Social Commitment.

A series of employee surveys, SMS campaigns, and workshops with employees and top management conducted by JSPL’s Sustainability Division has further indicated that JSPL has in its very essence a breakthrough innovative spirit embedded by its founding father, the revered O.P. Jindal, and this spirit clearly lives on within the organization in the ways we think and in everything we do. The very nature of the industry we are in as well as our large size makes us an important component in the growth story of every country JSPL is present in – the passion for building the Nation of our dreams is what really drives us on a daily basis. While we ensure the growth of all our stakeholders, but further as leaders in the industry and responsible corporate citizens we are concerned and active on issues of national and global significance. For this, we lead towards solutions to problems affecting the people of the world at large. As JSPL grows rapidly and diversify in products and geographic locations, this is who we are at our core.
<table>
<thead>
<tr>
<th>JSPL IN NUMBERS*</th>
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<tbody>
<tr>
<td><strong>Annual turnover of JSPL</strong></td>
</tr>
<tr>
<td>US$ 3.3 bn+</td>
</tr>
<tr>
<td><strong>Committed investments for future expansion across continents</strong></td>
</tr>
<tr>
<td>US$ 30 bn</td>
</tr>
<tr>
<td><strong>Export presence</strong></td>
</tr>
<tr>
<td>29 countries</td>
</tr>
<tr>
<td><strong>People strength</strong></td>
</tr>
<tr>
<td>15,000+</td>
</tr>
<tr>
<td><strong>Saplings planted till date</strong></td>
</tr>
<tr>
<td>7.4 mn+</td>
</tr>
</tbody>
</table>

*For FY 14-15, production capacities have been enhanced to 7.75 MTPA for steel making and 9 MTPA for pellet making.
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JSPL is a 25 year old organization which has undergone several changes over the years. The Company has not deviated from its core business of steel manufacturing which is quintessential to any country’s growth. In the last decade, JSPL has transformed into a multi-national corporation with expansion of its businesses in Asia, Africa, and Australia. The focus has also been on strengthening the domestic capacities to meet the global demand for steel and related products.

This growth trajectory, at JSPL, is fuelled by our values to create greater value for stakeholders through innovation and technology leadership. In year 2000, JSPL set up round caster unit at Raigarh. This has today evolved into one of the largest coal - based sponge iron plant in the world. In addition it has another steel mill plant has been established in Patratu, Jharkhand, which manufactures wire rods and TMT Rebars. The company aims for a fast-paced growth so as to contribute substantially to India’s long term prosperity.

As a core philosophy, JSPL’s growth story has at all times included an emphasis on Nation building and an active social commitment. More precisely, the company deploys significant resources to improve the Nation’s infrastructure, and work towards stabilizing India’s population, driving public cleanliness, and providing education and skills for all. The company has also won awards for its innovative business practices at several occasions.

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<tbody>
<tr>
<td>Shri O.P. Jindal, a first-generation entrepreneur and steel visionary started the indigenous single-unit steel plant in Hisar (Haryana)</td>
<td>Shri M.L. Gupta appointed as the first whole time director of the company</td>
<td>JSPL sets up first round caster unit in Raigarh</td>
<td>JSPL gets in expansion mode with MoUs with governments of Chhattisgarh &amp; Jharkhand</td>
<td>JSPL Mauritus Ltd (JSPLM) had acquired Shadeed Iron &amp; Steel Co. LLC (Shadeed) in Oman</td>
<td>JSPL launched the high-strength earthquake-resistant construction TMT rebars under the new brand ‘Jindal Panther’</td>
</tr>
<tr>
<td>The company had set up a coal washery of 2.5 million MT, introduced alloy steel rounds</td>
<td>JSPL builds first independent mega power plant in private sector capacity to generate 1000MW at Tanmar</td>
<td>JSPL gets in expansion mode with MoUs with governments of Chhattisgarh &amp; Jharkhand</td>
<td>International agreements with African, German cos for Coal gasification facility at its six million-tonne steel plant in Orissa</td>
<td>Commercial production of India’s Widest 5.0 meter wide plate Mill at Angul integrated steel plant</td>
<td>JSPL acquires CIC’s Energy Corp. Canada having 6 billion tonn coal resources in Botswana</td>
</tr>
<tr>
<td>JSPL among India’s top 40 fastest growing companies</td>
<td></td>
<td>JSPL Maurititus Ltd (JSPLM) had acquired Shadeed Iron &amp; Steel Co. LLC (Shadeed) in Oman</td>
<td></td>
<td>JSPL among India’s top 40 fastest growing companies</td>
<td></td>
</tr>
</tbody>
</table>
1.2 JSPL and current industry context

Growth of a country’s economy is dependent on some key factors – and the growth of the steel industry is amongst the foremost of those factors which determine the rise of Indian economy. It supports other sectors such as construction, housing, transportation, automobile, rail, making steel a catalysing agent for a Nation’s industrial growth. Steel has also been gaining importance in speciality uses in sectors such as power generation, petrochemicals, and fertilizers.

India occupies a central position in the global steel scenario, and is currently the fourth largest steel producer in the world with production of 81.2 Mega Tonnes in 2013 - slated to become the second largest steel producer by 2015-16. Presently, iron and steel industry contributes to about 2% of the Gross Domestic Product (GDP) and its weightage in the Index of Industrial Production (IIP) is 6.68%. The industry employs over five lakh people and registered an increase in production by 9.1 % in August, 2014 over August, 2013. Its cumulative index during April to August, 2014-15 increased by 2.0% over the corresponding period of previous year.

Another important factor which is bound to fuel the growth of the sector is the country’s current per capita steel consumption. Even though India’s per capita steel consumption has increased from 38Kg (in 2005-06) to 55Kg (in 2010-11) and later to 58Kg (in 2012-13), it is way short of the global average of 225Kg and even lower than countries such as Venezuela (93.3Kg) and Egypt (88.9) .

Given this immense potential for growth, JSPL is already on track towards expanding its steel and pellet manufacturing capacities. JSPL also aims to support this capacity through international expansions which would provide access to resources as well as to international markets.

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**Figure : Sector-wise steel consumption (FY2012-13)**

- Infrastructure: 3%
- Engineering and fabrication: 10%
- Autos: 22%
- Packaging: 23%
- Transportation: 63%

**Figure : JSPL’s capacity enhancement initiated in FY 13-14**

- **ANGUL**
  - Steel Melting Shop (SMS) capacity addition: 1.5 MPTA
- **BARBIL**
  - Moved towards completion of second pellet plant of 4.5 MPTA
- **OMAN**
  - 2 MTPA Steel Melting Shop Commissioned in April, 2014
- **TAMNAR**
  - 3x600 MW commissioned in 2013-14
  - 1x600 MW to be commissioned in FY14-15
2.0 What sustainability means at JSPL

Depending on the maturity levels of organizations, Sustainability has varying meanings for different organizations ranging from basic compliance to improving efficiency to driving business strategy. At JSPL Sustainability signifies business longevity. The Sustainability Division at JSPL was created in July 2014, as a successor to JSPL’s ‘Energy and Climate Change’ Division. It serves as a cross functional point to ensure that JSPL is on a path of authentic, speedy, and holistic growth.

The Sustainability Division is an integral component of JSPL’s core business. The Division’s priority is to ensure sustainability legal compliances; coordinate environment, corporate social responsibility, and health and safety divisions; address challenges that affect long term growth; bring in best practices at the workplace; transform key processes and mind-set towards a more systems based approach; and enhanced brand value.

The Chief Sustainability Officer is also part of the CEO’s office, and assists the CEO on macro-economic, human resources, organizational strategy, and public relations related agenda. The Chief Sustainability Officer also reports to the Chairman of JSPL to take forward JSPL’s social commitment on population stabilization, as well as overseeing the Chairman’s official speeches. This unusual set up of the Chief Sustainability Officer’s two additional roles with the CEO and the Chairman of JSPL ensures that key business sustainability related aspects are smoothly and strategically blended into JSPL’s operations, decisions, and communications.

The entire Sustainability Division is organized in a bottom up manner, with Sustainability Officers placed at every JSPL site location.
3.0 Materiality analysis at JSPL

At JSPL, we consider material aspects to be those economic, environmental and social factors which are significant to our business as well as to our stakeholders in the present times.

With this intention, JSPL conducted the first materiality assessment for corporate sustainability as a part of our strategy to determine long-term sustainability focus areas of our business. The assessment was useful in not only identifying material issues but also in identifying gaps between our focus areas and those rated as important by the stakeholders. As a result of the materiality assessment 11 material issues were identified, disclosures for which have been made in the relevant sections of the report. These material issues were:

1. Regulatory compliance
2. Corporate governance
3. Waste management
4. Raw material management
5. Training and development
6. Energy
7. Occupational health and safety
8. Customer aspects
9. Emissions
10. Community and
11. Employment

Determining materiality

Materiality exercise was conducted through a structured process which was devised in-house. This included review of primary data and secondary data (sustainability issues of the sector, geographically important issues, media articles and related information) to develop a pool of relevant aspects specific to the nature of our business. In order to get an inclusive view on the identified aspects, 18 stakeholder groups were identified on the basis of:

1. Degree of closeness of relationship between JSPL and stakeholder
2. Legitimacy of opinion and concern of stakeholder
3. Degree of influence of stakeholder
4. Willingness of stakeholder to engage with JSPL
5. Contribution of JSPL to stakeholder’s benefit
6. Contribution of stakeholder to JSPL’s growth
7. Financial risk
8. Social risk
9. Environmental risk

Discussions were held with relevant departments and top management (including the Group CEO) to shortlist the most important issues and provide weightage to the aspects based on the importance to the organization and potential importance to the respective stakeholders.* This materiality assessment exercise was very useful for determining gaps and prioritizing our way ahead.

* Since it was the first materiality exercise, it primarily remained inward looking, but we aspire to engage with the external stakeholders from next year for the purpose of charting out the key material aspects.
The 11 aspects that were identified as material (within the company boundary) in the above materiality assessment have been elaborated upon as disclosures that run through the entirety of this report. Further, specific GRI indicators relevant to these 11 aspects are also in line with the sustainability indicators established by the World Steel Association.

This has been presented in this report via the following structure:
3.1 Stakeholder engagement

JSPL operates across different domestic and international geographies and therefore is increasingly interacting with a variety of stakeholders. We believe that stakeholder engagement cannot be treated as a one-time event to meet the respective stakeholders. Instead we are trying to engage with stakeholders on a continual basis.

To further improve upon our stakeholder engagement and management practices, we would also be implementing the Stakeholder mapping and engagement policy in the next reporting cycle.

For all business purposes we have identified 18 stakeholders as relevant to our context. These stakeholders have been identified according to nine factors described in the materiality section.

---

<table>
<thead>
<tr>
<th>1. Government</th>
<th>2. Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Regulatory bodies</td>
<td>4. Public at large</td>
</tr>
<tr>
<td>5. Legal institutions</td>
<td>6. Media</td>
</tr>
<tr>
<td>7. Banks</td>
<td>8. NGOs / CBOs</td>
</tr>
<tr>
<td>11. Distributors / Customers</td>
<td>12. Industry associations</td>
</tr>
<tr>
<td>15. Community</td>
<td>16. Political institutions</td>
</tr>
<tr>
<td>17. Educational institutions</td>
<td>18. Flora and fauna</td>
</tr>
</tbody>
</table>

We engage with these stakeholders through various media which consists of a combination of stakeholder specific as well as general media. Some of these interactions with the stakeholders happen on a periodic or need based frequency. These interactions facilitate an exchange of information and opinions and an understanding of expectations and standards among the different groups.

These interactions take place in form of personal talks, and through forums and events. Employees are important stakeholders and the organizational culture in general is warm, interactive, caring under the umbrella of the ‘JSPL Family’. Regular surveys, and open communication across all ranks of hierarchy makes for a very well knit employee base. The direct personal conversations at shareholder dialogue events (such as AGM and other interactions with the current and prospective investors), conferences / exhibitions, supplier and customer meetings. Understanding the criticality of customer satisfaction, we carry out surveys aimed at evaluating our performance in this regard. Reputed third party market research firms are entrusted to carry out these surveys. Our sales team also interacts with specific customer groups like architects, automobile companies, etc. to create awareness about our products and address their specific needs/ queries. We have also been participating in policy advocacy for public good through the right forums such as industry associations and related forums.
<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Sustainability context</th>
<th>Team Responsible</th>
<th>Mode of Engagement</th>
<th>Frequency of Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investors</td>
<td>Recently, sustainability has been of interest to investors across the globe and is an important part of decision making. Recently introduced Business Responsibility Reporting and BSE GreenEx and CarbonEx are also instances of growing investor interest in sustainability aspects. JSPL has also been receiving queries from its investors and potential investors regarding sustainability performance.</td>
<td>Investor Relations’ Team</td>
<td>• Emailers&lt;br&gt;• Investor Conferences&lt;br&gt;• Roadshows&lt;br&gt;• Interactions with analysts&lt;br&gt;• Dedicated E-Mail ID&lt;br&gt;• Investor Page on Company website</td>
<td>Quarterly updates to all investors, Need based</td>
</tr>
<tr>
<td>Customers</td>
<td>Customers have played a critical role by demanding sustainable products. According to a recent CEO survey, 89% of CEOs identified consumers as critical to embedding sustainability issues into their core business. JSPL is no exception and recognizes customers as a very important stakeholder group on its sustainability journey.</td>
<td>Sales and marketing Team</td>
<td>• Annual Customer Satisfaction Surveys&lt;br&gt;• One to One Meetings&lt;br&gt;• Exhibitions&lt;br&gt;• Dealer meets</td>
<td>Annual feedback, Need based</td>
</tr>
<tr>
<td>Suppliers</td>
<td>At JSPL, we believe that supply chain is critical to driving efficiency in our business context. A reliable, resilient, and sustainable supply chain is a lynchpin for a crisis-free future. We are in the process of deepening our efforts to make JSPL’s supply chain sustainable.</td>
<td>Procurement Team</td>
<td>• Annual Vendor Meet&lt;br&gt;• One to One Meetings&lt;br&gt;• Supplier Audits</td>
<td>Annual&lt;br&gt;Daily basis and, Need based</td>
</tr>
<tr>
<td>Industry Associations</td>
<td>Industry Associations provide a platform not only to voice opinion and address concerns but also for knowledge enhancement and sharing. JSPL works towards leveraging these platforms and forums to voice concerns, support like-minded community, access resources, industry information and education opportunities.</td>
<td>Sustainability Team</td>
<td>Public Platforms/ Interactions</td>
<td>Need Based</td>
</tr>
<tr>
<td>Employees</td>
<td>Employees are the most important partners for success of the company. Employee engagement is very important in driving sustainability and can also lead to ripple effects in form of increased productivity, innovation, high morale and better retention.</td>
<td>Human Resources’ Team</td>
<td>• Emailers,&lt;br&gt;• Interactions,&lt;br&gt;• Employee Satisfaction Survey</td>
<td>Continual</td>
</tr>
<tr>
<td>Local Community</td>
<td>In present times, it is extremely important for any organization to function in sync with the community it operates in. Of late, communities are becoming increasingly aware about their rights which has made companies operate in a more conscious and responsible manner.</td>
<td>Corporate Social Responsibility Team</td>
<td>• Need assessment surveys&lt;br&gt;• Field Visits,&lt;br&gt;• Pamphlets, Interactions / Workshops / Seminars etc.&lt;br&gt;• Impact assessment studies</td>
<td>Continual</td>
</tr>
<tr>
<td>Media</td>
<td>Media acts as one of the strongest opinion maker in modern times</td>
<td>Corporate Communication Team</td>
<td>• Press Releases, Media Page on Company website&lt;br&gt;• Interviews and Press conferences</td>
<td>Need Based</td>
</tr>
<tr>
<td>Government and regulatory agencies</td>
<td>Lawmaking, implementation and monitoring institutions are of concern to any company. Engagement through a legit and ethical manner helps JSPL remain in line with the changing regulatory environment.</td>
<td>• Corporate Affairs Team&lt;br&gt;• Company Secretary</td>
<td>• Letters to concerned departments&lt;br&gt;• One to one meetings&lt;br&gt;• Meeting through other forum like</td>
<td>Need Based</td>
</tr>
</tbody>
</table>
Despite its large size, JSPL at its core is very much a social enterprise – its business and processes are designed to serve the social cause of building the Nation of our dreams. Sustainable business practices are therefore very important for us. In the past few years, we have been working towards developing robust systems which have helped us adopt a proactive approach to making the business sustainable and socially relevant.

The first step, in this direction, was taken up by setting up the Environment Management Division (EMD) and the Corporate Social Responsibility (CSR) divisions. These divisions now operate across all our units with dedicated personal equipped with the specific skill sets. This was followed up by setting up Climate change and sustainability department in 2011. This department was, later, renamed to Sustainability Division in 2014 with the aim of focussing on holistic sustainability avenues and aligning sustainability with the core strategy of the organization. This was marked by the appointment of company’s Chief Sustainability Officer to ensure that JSPL is on a trajectory of authentic and holistic growth.

In order to reaffirm our promise of balanced and inclusive growth, we have rolled out systems for quality management (ISO9000), environment management (ISO14000) and occupational health and safety management (OHSAS18000) at all our units. Our unit at Angul has also been certified for social accountability (SA 8000). Our power plant at Tamnar has recently been certified as ISO 50001. With the aim of manufacturing products at lower costs and reduced impact on environment and society, we have pioneered on bringing ground-breaking technologies for the first time in India and also innovative initiatives including enhanced operational efficiencies, greater cost optimization and new product applications. Some of these innovations are:-

- Coal gasification plant
- Use of local raw materials for use in iron-making
- Use of blast furnace gas as replacement for Fuel Oil (FO)/Light Diesel Oil (LDO)
- Product innovations such as those for use of light gauge steel for infrastructure, steel rails for high speed trains, suspended concrete flooring system (Jindal Speedfloor).

We are also focussed on utilizing our waste by:-
1. Reducing the waste generation by developing more efficient systems,
2. Developing and promoting use of waste through new applications such as road
3. Municipal solid waste processing to usable forms such as methane etc.

Today, JSPL views sustainability aspects not in silos but has been working towards integrating it throughout our operations. It is a unique model of ensuring sustainability and social commitment right at the core of our business ethos, processes, and products.

4.0 Sustainable business
4.0.1 Our Business model

JSPL’s BUSINESS MODEL: PROLIFIC VALUE CREATOR WITH GLOBAL INTEGRATION

BACKWARD INTEGRATION
- Thermal Coal
  - Care IV/ 1, 2, 3 & others
- Iron Ore
  - Terasa
  - Jeralalapur
  - Long-term contracts
- Coking Coal
  - WCL
  - Australia
  - Indonesia
  - Mozambique

CORE BUSINESS
- Pellets
  - Barbil
- Captive Power
  - Angul
  - Raigarh
- Gas
  - Long-term contracts
  - Oman
- Steel
  - India (Angul, Patratu & Raigarh)
  - Oman
- Mines & Minerals
  - Asia, Australia & Africa
- Power
  - India (Tannor)

FORWARD INTEGRATION
- Moving up the Value Chain
  - Fabricated Structures: Purijipatra
  - Machinery Division: Raipur
  - High Value Added Products

Adjacencies
- Construction Materials | Cement | Power (Hydro & Wind)

Planning
- Capacies & Technologies
- Logistics
- Products/Markets/Branding

People
- Talent Acquisition & Development
- Continuous Leadership Pipeline
- People Leading People

Processes
- Governance
- Strategic: GEC, CMT, SMC
- Operational: Marco, UniCo Systems
Being at the right place at the right time is key to surviving in the current volatile marketplace. To become more responsive to the needs of customer and market requirement companies need speedy delivery and good quality products. This demands an integration of the supply chain.

JSPL is no exception. We have been successful in integrating our supply chain through both forward and backward integration. Today, we have our own coal and iron ore reserves across three continents. Having a well-spread out resource base has been an important part of our strategy to diversify our portfolio geographically in order to reduce risks. We also source iron ore externally which is primarily used for pelleting and sinter operations. This externally sourced iron ore is later sent to Raigarh and Angul for processing to pig and sponge iron and later converted to steel. We have also been successful in securing other resources such as gas through long term contracts; one of which was signed at Oman for its DRI based unit.

We are also trying to move forward in the supply chain ladder through fabricated structures, machinery division and other high value added products. In August 2013, we adopted a differentiated customer-centric B2C model to elevate the brand to the next level of growth. Our first product under the brand name of “Panther”, launched in August 2013, is high-strength earthquake-resistant construction TMT rebars.

These developments taken up for integrating our supply chain have provided JSPL with a competitive edge which is unparalleled across the industry.
JSPL’s operations lay a major emphasis on customer centricity, with the objective of creating a positive consumer experience in a way that our competitors do not. Quality of JSPL products has consistently received positive customer feedback. The current focus is on ensuring On-Time delivery of JSPL products to all our customers.

Business to Customer

JSPL launched a new retail brand “Jindal Panther™” in India on 5 August 2013 to provide value-added products and services to independent house building customers. In addition to TMT Rebars, Jindal Panther also offered stirrups and ready-to-use cut-and-bend TMT bars through market-based service centres.

Customer-centricity is a major focus area for Jindal Panther, emphasizing on ‘On-Time-In-Full’ delivery. Further initiatives for differentiated customer service by Jindal Panther also includes:

- Branding all JSPL dealer shops under JSPL’s unique ‘Retail Identity Programme’ giving them a uniform and consistent identity
- Training of staff
- Provision of Certificate
- Home delivery facilities

Business to Business

Customer Centricity is extremely important to JSPL’s Business to Business segment.

One of the recent initiatives JSPL has undertaken towards this is Key Accounts Management. This includes a training programme for Key Accounts, supporting KAMs to do a competitive analysis for each of their accounts and make their action plan with timelines accordingly. Further all orders from Key Accounts are serviced 100% within a specified number of days of clearance. Various other facilities such as uninterrupted supplies to Key Accounts, greater monitoring of Key Account orders, delivery of material as per specific customer requirements.

Other initiatives to ensure customer satisfaction include direct feedback retrieval systems, and grievance mechanisms.
4.1 Sustainable processes

In the given business context of growing regulatory and stakeholder pressures, companies are rethinking about correct business conduct and right ways to perform. Business decisions right from procurement of raw materials, type of energy they consume, processes, hiring process, to disposal of waste have all been put under the scanner. Evolving to a value based system to make ethical choices and greater disclosures to become more transparent is the only alternative available to businesses.

Specific to the regulatory context, International codes of conduct such as Sarbanes-Oxley Act (2002) and a directive issued by the European Union (which made it mandatory for all listed companies in EU member states to publish corporate governance report) have been followed by regulations in India as well. Securities and Exchange Board of India (SEBI) mandated Clause 49 of listing agreement on corporate governance, according to which directions were issued on the constitution of Board and its committees, Code of Conduct etc. and reporting of compliance on corporate governance.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 2011</td>
<td>Ministry of Corporate Affairs issues National Voluntary Guidelines (NVG)</td>
</tr>
<tr>
<td>Jun 2012</td>
<td>Rio+20: Development of Sustainable Development Goals (SDG)</td>
</tr>
<tr>
<td>Aug 2012</td>
<td>Introduction of Clause 55 Listing agreement: SEBI’s Business Responsibility reporting made mandatory for top 100 companies, same to follow for all listed companies</td>
</tr>
<tr>
<td>Dec 2012</td>
<td>State Action Plans on Climate Change to follow National Action Plan on Climate Change</td>
</tr>
<tr>
<td>Sep 2013</td>
<td>Companies Act 2013 notified through official gazette (includes 2% of net profits to be directed towards CSR)</td>
</tr>
</tbody>
</table>

4.1.1 Ethics and values

JSPL’s corporate governance philosophy is derived from its values and ethical conduct. We believe that corporate governance and ethics as overlapping aspects and cannot be considered in isolation.

The Group Code of Conduct (CoC) plays the key role of detailing the model code on operating principles and as employees, management and business associates. CoC, on one hand, acts as a deterrent towards corruption, fraud, insider trading, and other malpractices while on the other, promotes a harassment free workplace, ensuring confidentiality, and fair competition. Apart from the CoC, the company has a corporate disciplinary committee at the corporate office and local disciplinary committees at sites. These committees work under the purview of the Violations Policy. In line with this policy, the company has appointed a Group Ethics Officer who plays a pivotal role in strengthening the standards of ethical and professional conduct within JSPL. In addition to this framework, the company also has a Whistle Blower Policy, which provides employees a fair and transparent platform for voicing their concerns. Sufficient mechanisms have been put in place to ensure confidentiality and protect the whistle blower from any form of harassment / victimisation. The policy covers instances pertaining to negligence impacting public health and safety, criminal offence and unethical/favoured/biased behaviour etc. The policy is directly monitored by the Group Ethics Officer.

These policies are applicable to all internal stakeholders of JSPL, and its subsidiaries. All suppliers and contractors are subject to certain ethical standards through appropriate clauses in our contracts which the counterparty is obligated to follow. Contracts are inclusive of clauses to prevent unethical practices.

“Anything that changes your value, changes your behaviour.”
4.1.2 Corporate Governance at JSPL

Corporate governance resides in the way we conduct our business at JSPL. In the past two years especially, JSPL has made tremendous headway in putting in place well defined decision making structures. It is still work in progress to transform mind sets to abide by these structures.

The highest governing body responsible for framing and implementation of corporate governance policies is our Board of Directors (‘Board’). The Board’s role includes creating value for company’s stakeholders while remaining committed to its vision, mission and values. JSPL’s Board is committed to adhering to the highest standards of corporate governance practices and to achieve this objective, the Board has formally adopted the Group Code of Conduct (CoC), apart from other regulatory requirements. To safeguard interest of all stakeholders, harmonize conflict of interest, assessing performance of the management, we have appointed independent directors. All Board of Directors have expertise in the fields of industry, operations, finance, legal and management. The Board provides strategic guidance and independent views to the Company’s management while discharging its fiduciary responsibilities.

The Board meets at regular intervals to discuss and decide on Company / business policies and strategy apart from other regular business matters. Board Meetings are usually held at the Corporate Office of the Company at New Delhi. During the financial year ended on 31st March, 2014, Six Board Meetings were held on 25th April, 2013, 30th July, 2013, 30th August, 2013, 30th October, 2013, 28th January, 2014 and 21st March, 2014. Maximum time gap between two consecutive meetings had not exceeded 4 months.

The Board Committees play a vital role in strengthening the corporate governance practices and focus effectively on the issues and ensure expedient resolution of the diverse matters. The Committees also make specific recommendations to the Board on various matters when required. All observations, recommendations and decisions of the Committees are placed before the Board for information or for approval. The Board has constituted six committees which meet regularly.

The HSE – CSR Committee oversees the implementation of quality policy, occupational health policy, environment policy and CSR policy. The Committee provides direction and monitors progress in the stated areas. It also reviews operational performance, key safety and environmental risks and compliance of various laws applicable for health, safety, and environment. The Committee also makes recommendations on CSR budgeting, spending and activities to be undertaken in the given business context. The Committee is chaired by an

Board Committee of JSPL

1) Audit Committee
2) Nomination and Remuneration Committee
3) Stakeholders Relationship Committee
4) Health, Safety, Environment and CSR Committee (HSE-CSR)
5) Governance and Business Ethics Committee
6) Sub-Committee of Directors
independent director and comprises one other independent
director and two executive directors. The Senior Officers from
the respective departments of the Company are invited to its
meetings to brief the members and present reports on the
items being discussed at the meeting. During the reporting
period, the committee met four times.

In order to further complement corporate governance at a more
functional level, we have a combination of Strategic Governance
structure and an Operational Governance structure. Strategic
Governance structure incorporates the deployment of a high
level Group Executive Committee (GEC), Core Management
Team (CMT) and a Senior Management Committee (SMC), all
with individual and collective roles and responsibilities. On the
other hand, Operational Governance structure incorporates the
deployment of high level Management Committees (MANCO)
for each business segment and Unit Committees (UNICO)
at each location. Meetings and deliberations at these levels
ensures timely and appropriate decision making and helps
drive collective change in an efficient and effective manner.

4.1.3 Sustainability governance at JSPL

JSPL has evolved from the traditional ways of managing
sustainability through Board committees addressing
sustainability issues in silos and as being only relevant to
environment and CSR departments. Sustainability at JSPL is
treated as an important element of its core business.

Sustainability governance at JSPL is led by the Chairman’s
Vision Group (CVG) which works to identify and create JSPL’s
unique identity sourced from the Chairman’s vision and such
that it articulates appropriately JSPL’s business and values.
CVG is a cross functional group comprising of Corporate
Communications, Sales & Marketing, Power Projects,
Environment Management, CSR, OHS, Finance & Accounts
and Sustainability departments. This group worked with over
100 employees to identify strengths and challenges at JSPL’s
workplace, culture, innovation, brand image and processes.
Another 5,000 plus employees were involved in a survey for
finding process or product innovations across all divisions; 651
innovations were received. Based on the Chairman’s vision,
inputs received from the employees, and CVG discussions it
was concluded that JSPL’s unique corporate identity was built
on the three pillars of innovation, social commitment and
nation building.

Further, the company has sustainability officers at Angul,
Barbil, Patratu, Raigarh, Raipur, Tamnar and Tensa sites. These
sustainability officers have expertise in different fields such as
HR, environment, business excellence, production, and quality
which helps the department in getting an overall understanding
of the business functions and strategy.

In order to strengthen our sustainability management practices,
we are in the process of implementing the Sustainability
Performance Management software and are also linking it to
the existing ERP and SAP systems for HR, materials, finance
etc. Through this system we aim to create a single dashboard
of all sustainability related features which would represent
live data for all our sites. The software has been used for data
management for this year’s report as well.
4.2 Sustainable Steel and Power Production

Steel, power, construction materials being our most significant products, we are focussed on producing them in an efficient and sustainable way, supplying in a variety of applications such as automobiles, defence, aerospace, ship building, engineering, railways, roads etc that ultimately lead to building the Nation of our dreams.

In fact steel ranks high in the sustainable product segment portfolio because of its characteristic to be 100% recyclable without loss of quality and has a potentially endless life cycle. Further, sectors supporting the new greener economy - renewable energy, resource and energy efficient buildings, low-carbon transport, infrastructure for fuel efficient and clean energy vehicles and recycling facilities all depend on steel. With respect to making our steel even more sustainable, we are working towards reducing our impact on the environment, because use of energy and raw materials result in Greenhouse gas emissions and air emissions. All our units in India are maintained as zero discharge units ensuring maximum possible utilization of wastewater. We have also been closely monitoring the alternative raw materials to reduce dependencies on virgin materials.

Our unit at Oman, used 55,758 tonnes of iron ore, 19,79,358 tonnes of pellets and 1,346 tonnes of lime powder.

Raw material consumption for JSPL’s Indian operations for FY 2013-14*

<table>
<thead>
<tr>
<th>Material</th>
<th>Consumption (in Thousand Tonnes)</th>
<th>Material</th>
<th>Consumption (in Thousand Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>733.44</td>
<td>Bentonite</td>
<td>18.00</td>
</tr>
<tr>
<td>Dolomite</td>
<td>419.07</td>
<td>Clinker</td>
<td>178.80</td>
</tr>
<tr>
<td>Calcined lime (Purchased)</td>
<td>42.42</td>
<td>Gypsum</td>
<td>23.07</td>
</tr>
<tr>
<td>Burnt Dolo (Purchased)</td>
<td>48.16</td>
<td>Billets</td>
<td>379.94</td>
</tr>
<tr>
<td>Slabs</td>
<td>300.38</td>
<td>DRI (Purchased)</td>
<td>215.59</td>
</tr>
<tr>
<td>DRI</td>
<td>179.83</td>
<td>HBI</td>
<td>117.02</td>
</tr>
<tr>
<td>Iron Ore</td>
<td>1,294.31</td>
<td>Graphite Electrode</td>
<td>6.83</td>
</tr>
<tr>
<td>Iron Ore Fines</td>
<td>6,275.45</td>
<td>Electrode Paste</td>
<td>0.69</td>
</tr>
<tr>
<td>Pellet</td>
<td>1,663.95</td>
<td>Total virgin / processed material used</td>
<td>11,896.96</td>
</tr>
<tr>
<td>Scrap</td>
<td>227.29</td>
<td>Finished scrap</td>
<td>15.53</td>
</tr>
<tr>
<td>Slag</td>
<td>300.75</td>
<td>Total waste reused as raw material</td>
<td>543.57</td>
</tr>
<tr>
<td>Total raw material consumption</td>
<td>12,440.53</td>
<td>Percentage of waste reused as raw material to total consumption</td>
<td>4.37</td>
</tr>
</tbody>
</table>

*Includes data from Indian operations at Angul, Barbil, Raigarh, Patratu and Tensa.
Our power business is managed by Jindal Power Ltd. has adopted state-of-the-art technology and world-class innovative practices for project execution, management expertise, advanced safety features and consistent quality focus. During 2013-14, JPL commissioned three units of 600-MW capacity with a total investment of around US$ 2 billion. JPL is targeting a 8,109-MW installed capacity which would also include renewable sources of energy such as hydro, solar and wind by 2020. With respect to operational efficiency, we have ranked third in the list for highest Plant Load Factor (PLF) among the major 25 Thermal Power plants above 200 MW capacity (by CEA till December 2013). These power operations at Tamnar function with zero discharge and focus on reducing auxiliary energy consumption through energy conservation initiatives such as optimization of boiler igniter cooling air and installation of two small sized screw compressors in tandem with already installed 3-large size centrifugal compressors, reducing Condensate Extraction Pump (CEP) stages from 8 to 7, Replacement of FRP Blade of cooling tower with FRP Blade in one cell etc.

Apart from these thermal power operations, we are developing a strong base of hydro-electric power of 6100MW. These projects are under implementation in partnership with Hydro Power Development Corporation of Arunachal Pradesh Limited (HPDCAPL).

### JSPL's Production during FY 2013-14

<table>
<thead>
<tr>
<th>Product</th>
<th>Production in FY 2013-14 (in MT)</th>
<th>Production in FY 2012-13 (in MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponge Iron</td>
<td>13,19,985</td>
<td>13,19,976</td>
</tr>
<tr>
<td>Finished steel products</td>
<td>21,53,613</td>
<td>21,43,750</td>
</tr>
<tr>
<td>Semi steel products</td>
<td>28,85,779</td>
<td>30,23,974</td>
</tr>
<tr>
<td>Pellets</td>
<td>41,48,974</td>
<td>40,42,025</td>
</tr>
<tr>
<td>Power</td>
<td>5,643.95 million Kwh</td>
<td>6,027.82 million Kwh</td>
</tr>
<tr>
<td>Casting (Raipur)</td>
<td>1,791</td>
<td>1,933</td>
</tr>
<tr>
<td>Machining (Raipur)</td>
<td>14,033</td>
<td>12,510</td>
</tr>
<tr>
<td>Iron Ore mined (Tensa)</td>
<td>5,41,000</td>
<td>5,64,000</td>
</tr>
<tr>
<td>Coal (Captive mines)</td>
<td>59,99,000</td>
<td>59,99,000</td>
</tr>
</tbody>
</table>

### 4.2.1 Sustainable production

We believe that JSPL’s success lies in taking forward all stakeholders engaged in the production process.

With this philosophy, we have been investing to make our systems robust, so as to reduce our impact on the environment and our communities. We have implemented systems to fulfill the applicable legal environmental protection requirements and those of ISO9001, ISO14001 and OSHAS18001 at all our units. Our unit at Angul has also been certified for social accountability (SA 8000). Our power plant at Tamnar has recently been certified as ISO 50001. These systems operate on the principles of minimizing pollution, wastages and energy usage during manufacturing and maximizing the harmony between operations and surroundings.
The company has also developed a strong Environment Management Division (EMD) which comprises of trained and technical staff which manages the environment related aspects of our units and projects. EMD has representation at all units, with reporting to Unit Head as well as to the Corporate EMD. This team works towards minimizing the impact of our operations throughout the life cycle of our project; it includes – assessment of new projects and their potential impact, design a comprehensive environment management plan to mitigate potential effects, monitor and control emissions and discharges, ensure all environment compliance at all times, create awareness among the workforce for environmental safeguards, increase and protect green cover with the premises, and work towards resource conservation. EMD is headed by the Corporate Environment Head.

We have also established modern environmental laboratories at our units, equipped with sophisticated instruments, for conducting quality assessment of environmental parameters (air quality, water quality, noise and so on) as well as emissions and discharges (stack emissions and liquid effluents). Standard Operating Procedures (SOPs) are in place as part of the ISO 14000 benchmarks. These ensure regular monitoring of energy consumption and conservation, waste generation and disposal, air and GHG emissions, noise etc.

Reducing our emissions

For managing the emissions through our operations, we have installed air emission protection equipment such as Electrostatic Precipitators (ESP), scrubber systems, cyclones, bag-houses, and waste heat recovery systems. We have also installed a centralised de-dusting system with an electrostatic precipitator for dust control in the raw material handling area of the Sinter plant. Sinter plant has been installed to collate all fines and usable wastes which are used by inducting them into the blast furnace.

The company has installed state-of-the-art pollution control devices suitable for the purpose of reducing atmospheric pollution. Real time check on performance of these devices is done through automated online analysers such as opacity meters and ambient air quality monitoring stations (AAQMS). During the reporting period, five bag-filters were installed at Raigarh and fume extraction system was also installed at the Raigarh Steel Melting Shop (SMS) to arrest dust from primary and secondary EAF.

During the reporting year, our GHG Scope 1 emissions’ for the year are estimated at 24,265 Thousand Tonnes CO2 while Scope 2 emissions at 132 Thousand Tonnes CO2. GHG Scope 1 emissions for JPL, Tamnar operations were 9,812 Thousand Tonnes CO2.

* Scope 1 emissions calculated for Indian operations including Angul, Barbil, Dongamauha Captive Power Plant, Patratu, Raigarh, Raipur, Tamnar and Tensa
Energy management

Energy management at JSPL is taken up at unit level. Various energy management initiatives are taken up to reduce the energy consumption and improve energy efficiency of the units. During the year, initiatives taken up to reduce energy consumption include replacement of obsolete equipment with new more efficient equipment, use of new more energy equipment and machines for future expansion (which may also include incurring a higher capital expenditure), and improving and optimizing the performance of existing equipment and machinery. Some initiatives to use renewable sources of energy such as solar power were also taken up at Angul, Raipur and Raigarh. Some of these initiatives taken up during the reporting period are discussed below:-

1. Oman
We completed 2MTPA SMS facility at Oman, which is installed with 200 MT Ladle Furnace, Continuous Billet Caster and Vacuum Degassing Furnace making it one of the most compact and energy-efficient steelmaking facilities globally.

2. Angul
a. At Angul, energy efficient 1.5 MTPA Coke Oven Gas Vertical Shaft DRI Plant is being planned to ensure re-usability of Coke Oven Gas. Along with this, 30.5MW power was generated from the process steam using Back Pressure Turbine with steam extractions was also initiated during 2013-14.
b. Angul also witnessed significant energy savings through hot charging of DRI into Electric Arc Furnace which resulted in an energy saving of 125 KW/TLS.

3. Raigarh
a. Raigarh coal mines were certified as ISO 50001:2011 by M/s DNV GL Business Assurance.

b. Raigarh unit is also expected to save 1903 Kl/yr of diesel due to modification in injection system. Oxygen injection system was replaced to a fuel less system in the SMS plan to reduce diesel consumption.
c. FRP blades were installed at the unit which helped it achieve an estimated power saving of 101000 kwh/yr
d. Additional saving of 1269 tonnes of coal was achieved by Prevention in rise in blow pipe temperature thus avoiding cooling of red hot blow pipes in BF-2
e. Air leakage and compressed air optimization in MLSM has also helped in saving electrical power of 8992 kwh/yr
f. Electrical power saving of 190000 kwh/yr was achieved due to pump optimisation
g. Secondary voltage of transformer in SMS-3 was reduced leading to electrical power saving of 123600 kwh/yr.

4. Raipur
Solar power from small solar plant of 15 KW was utilized for street lighting. The total generation & consumption of solar power during the financial year 13-14 was over 24,000KWH.

5. Tamnar
a. Optimization of Boiler Igniter cooling air and installation of two small sized screw compressors in tandem with already installed 3-large size centrifugal compressors resulted in estimated electricity saving of more than 15,00,000 kwh/yr.
b. The existing 8-stage CEPs are reduced to 7-stage by installing a dummy stage which helped save us more than 2,00,000 kwh/yr.

Non-renewable direct energy consumption*

<table>
<thead>
<tr>
<th></th>
<th>Indian operations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coking coal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (tonnes)</td>
<td>11,51,558</td>
<td>11,51,558</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>32,474</td>
<td>32,474</td>
</tr>
<tr>
<td>Total non-coking coal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (tonnes)</td>
<td>1,31,79,132</td>
<td>1,31,79,132</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>2,11,959</td>
<td>2,11,959</td>
</tr>
<tr>
<td>Total Coke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (tonnes)</td>
<td>1,37,299</td>
<td>1,37,299</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>3,883</td>
<td>3,883</td>
</tr>
<tr>
<td>Total FO / HSD / LDO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (KL)</td>
<td>1,86,887</td>
<td>1,86,887</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (Kg)</td>
<td>2,742</td>
<td>2,742</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>130</td>
</tr>
</tbody>
</table>

*Energy consumption from Indian operations includes Angul, Barbil, Dongamauha Captive Power Plant, Patratu, Raigarh (steel and cement), Raipur, Tamnar and Tensa
Our unit at Oman registered direct energy consumption by use of 41,96,13,305 Sm3 natural gas. Electricity consumption of the unit was 16,93,71,751 kwh.

Direct energy consumption through renewable sources was estimated at 21820 kwh, which was through our solar power plants of 25KW and 15KW capacity each at Tamnar and Raipur respectively.

Indirect energy consumption through purchased electricity for Indian operations for FY 2013-14 was 1,60,693 Mwh.

Waste Management

Waste generated from steel units is essentially the by-products of the various processing steps involved in the production of iron, steel and power. These wastes include tailings produced during the extraction and beneficiation processes, slag and sludge during the mineral processing, ash from power plant and other hazardous wastes such as used oil, tar, and char.

At JSPL, we have been exploring new ways of using these wastes as productive inputs for other processes. Some of the initiatives taken for effective waste management include power generation from coal rejects fines and middling in AFBC boilers, 100% reuse of slag generated from blast furnace, changing the sinter plant to utilize 100% mill scale and flue dust generated in mills and blast furnace, use of SMS slag after granulation for road making, and use of fly ash for brick manufacturing and cement manufacturing.

At Raigarh, the company has entered into a long term agreement with M/s ECOMAISTER, South Korea for preparation of PSB (Precious Slag Balls) through slag atomizing technology. The project will be commissioned in May 2014. The granules produced through this technology has multiple applications as abrasive blast material, counter weight, bicycle road material, polymer concrete material, road pavement material, hume pipes, concrete bricks, concrete pipes etc.

Waste generated at our unit at Oman, generated 84,352 MT of non-hazardous wastes and 200 kgs of e-waste and 16 KL used oil.

During the reporting year, a Bio-Methanation Plant (BMP) was installed, at Barbil, in association with Bhabha Atomic Research Centre (BARC), Mumbai for bio-gas production. Bio-degradable from residential area is collected, segregated and fed in this 3 TPD bio-methanation plant. Methane gas generated is used as a fuel in canteens. Another BMP is already functional in Raigarh which is the one of its kind project in Chhattisgarh. In Angul, a similar initiative was taken up to convert organic waste, generated from the plant, offices, township, into compost by adopting windrow technology method. For recycling waste paper, a paper recycling unit has been set up at Angul. The recycled paper is used to make products like files, visiting cards, folders, envelopes etc.

During the year, hazardous waste was produced in form of used oil, used oil filters, oil contaminated cotton, oily sludge and PGP TAR and sludge were produced. All these wastes were either reused internally or sent to authorized-recyclers. A small amount of waste is also stored at sites within the permissible limits. This includes 83KL of used oil and 40 Kgs of oil contaminated cotton.

Besides there was 8100Kgs of lead acid batteries from JSPL mines, Barbil, and Tamnar, 271 Kgs of bio-medical waste from

### Hazardous waste generation

<table>
<thead>
<tr>
<th>Waste</th>
<th>Units</th>
<th>Value generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Oil</td>
<td>KL</td>
<td>233</td>
</tr>
<tr>
<td>Used Oil filters</td>
<td>No.</td>
<td>600</td>
</tr>
<tr>
<td>Oil Contaminated Cotton</td>
<td>Kg</td>
<td>4333</td>
</tr>
<tr>
<td>Oily Sludge</td>
<td>KL</td>
<td>30</td>
</tr>
<tr>
<td>PGP TAR and Sludge</td>
<td>Tonnes</td>
<td>8384</td>
</tr>
</tbody>
</table>

*Apart from these renewable sources, we also have bio-gas plants at Barbil, Raigarh and Tamnar for which energy consumption has not been reported.

**This includes data from Indian operations in Angul, Barbil, Dongamauha Captive Power Plant, Raigarh, JSPL mines, and Tenesa
JSPL mines and Tenasa, and 19.3 tonnes of e-waste from Barbil and JSPL mines was produced during the year. These waste were disposed-off as per respective applicable regulations.

Other than these wastes there are different types of non-hazardous wastes which are generated through our operations. We have been working to reduce our waste and utilizing the waste generated to maximum extent possible. For our Indian operations, we have been successful in recycling/reusing over 70% of the non-hazardous waste generated (excluding the overburden).

Non-Hazardous Waste Generation in FY 2013-14*  

<table>
<thead>
<tr>
<th>WASTE</th>
<th>INDIAN OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Ash (MT)</td>
<td>4079500</td>
</tr>
<tr>
<td>STP Sludge (Kg)</td>
<td>600</td>
</tr>
<tr>
<td>MS Scrap (Own) (Pieces)</td>
<td>769</td>
</tr>
<tr>
<td>MS Scrap (Own) (Tonnes)</td>
<td>4105.35</td>
</tr>
<tr>
<td>Coal Reject (Tonnes)</td>
<td>644943</td>
</tr>
<tr>
<td>Over Burden Dump (m3)</td>
<td>1,23,40,000</td>
</tr>
<tr>
<td>Mill Scale and End Cut (tonnes)</td>
<td>30558</td>
</tr>
<tr>
<td>Slag (tonnes)</td>
<td>45654</td>
</tr>
<tr>
<td>Char (Tonnes)</td>
<td>382478</td>
</tr>
<tr>
<td>ABC dust (Tonnes)</td>
<td>25368</td>
</tr>
<tr>
<td>Bag filter dust (Tonnes)</td>
<td>161154</td>
</tr>
<tr>
<td>Accretion (Tonnes)</td>
<td>68525</td>
</tr>
<tr>
<td>BF Slag(Tonnes)</td>
<td>576457</td>
</tr>
<tr>
<td>Dust Catcher Dust(Tonnes)</td>
<td>7965</td>
</tr>
<tr>
<td>Slurry from ETP (Tonnes)</td>
<td>9483</td>
</tr>
<tr>
<td>Stock House dust (Tonnes)</td>
<td>2644</td>
</tr>
<tr>
<td>Cast house de-dusting dust (Tonnes)</td>
<td>1392</td>
</tr>
<tr>
<td>SMS slag (Tonnes)</td>
<td>1007506</td>
</tr>
<tr>
<td>SMS Bag filter dust (Tonnes)</td>
<td>49157</td>
</tr>
<tr>
<td>Caster Scale (Tonnes)</td>
<td>9,163</td>
</tr>
<tr>
<td>SAF Slag (Tonnes)</td>
<td>39,135</td>
</tr>
<tr>
<td>SAF Bag filter dust (Tonnes)</td>
<td>5,664</td>
</tr>
<tr>
<td>PGP Ash (Tonnes)</td>
<td>1,48,877</td>
</tr>
<tr>
<td>Mill Scale (Tonnes)</td>
<td>26679</td>
</tr>
<tr>
<td>Lime / dolomite plant Bag filter dust (Tonnes)</td>
<td>18150</td>
</tr>
<tr>
<td>ESP Dust (Tonnes)</td>
<td>7731</td>
</tr>
<tr>
<td>Sinter Bag filter dust (Tonnes)</td>
<td>4781</td>
</tr>
<tr>
<td>Dust from settling chamber (Tonnes)</td>
<td>990</td>
</tr>
<tr>
<td>Bottom Ash (Tonnes)</td>
<td>4,20,065</td>
</tr>
</tbody>
</table>

* Data from Indian operations includes Angul, Barbil, Dongamauha, Raigarh, Tamnar, JSPL Mines and JPL Mines.
Water Management

Water management has been one of the key focus areas for JSPL. We have been successful in maintaining our India units as zero discharge units with the help of reuse and recycling of water for different purposes like scrubbing of flue gases from blast furnace, use of blow down water for slag granulation, reuse in rolling mill (after oil is skimmed out), installation of close-circuit effluent-recycling system in DRI plant, slag cooling and dust suppression, and reuse of sewage water (after treatment) for horticulture. Rainwater harvesting structures have also been constructed for ground water recharge in consultation with the water resource department across all units. Also, the surplus rainwater collected in the open pits is used as make up water during operations of the unit.

During the year, two new STPs, of capacities 150KLD and 100KLD each, were installed at Pellet Plant in Barbil. At Patratu, four groundwater recharge tanks through rainwater harvesting were constructed.

4.2.1.2 Managing our social footprint

In a global enterprise like JSPL, the key to sustainability is to foster a culture of collaboration and co-creation among our widely dispersed employee base. We are working with our employees to develop a collaborative enterprise on the basis of mutual trust and welfare. For this, we have developed and implemented systems to hire the right talent, deepen employee engagement and increase employee utilisation and productivity.

In our quest to nurture talent and provide best facilities to our employees we have developed and implemented a gamut of employee centric policies including:-

- Safety and occupational health policy
- Training policy
- Transfer policy
- Deputation policy
- Job rotation policy
- 360° feedback policy
- Group personal accident insurance policy
- Workmen compensation insurance policy
- Superannuation policy
- Business travel policy
- HRA Policy

Apart from these policies, standard procedures have also been developed by the HR department for recruitment and selection, joining formalities, probation and notice period, leave rules, succession planning, career development scheme, rewards and recognition, learning and development, medical and accidental benefits, employee separation, retirement benefits, travel, welfare and recreation etc. We would also be implementing new policies such as Employee well-being policy and human rights policy to further strengthen our commitment to our employees.

To sustain the organisational growth trajectory, JSPL is proactively focusing on the following:

- We are acquiring, developing and nurturing high-potential talent. Graduates from IIMs, IITs and NITs are recruited at entry level; lateral hiring is also conducted globally
- We formulated a leadership capability development programme to identify and groom future leaders by designing and implementing Individual Development Programme (IDP)
- In addition to structured learning input to entry-level employees (through classroom, On-the-Job Training, action learning and self-paced e-learning modules), need-based technical training on project management and environment management are imparted continuously across all hierarchies and locations
- To retain the best of talent, target-rating distribution and rewards are meticulously adhered to.
- Close interaction across all employees is encouraged.
- Conducive people policies (housing, healthcare) are adopted by the management to enhance retention

Systems based approach

At JSPL, we have re-defined the role of our HR function, and brought in the systems to support the above stated policies. With the organisation adding new dimensions and constantly redefining scales – the need for automation and data integrity is paramount. We are, now, leveraging advanced analytics to nurture talent and our HR strategies create an enabling environment to incubate future preparedness. Financial year 2011-12, observed the integration of systems and processes by the deployment of a SAP HR module.

In order to build a robust HR function for our new global locations, a detailed job analysis is conducted for all unique roles. The process entails job evaluation and designing to enable the articulation of a robust organisational structure, competitive compensation benchmarking and clarity in the deployment of KPIs and goal setting.

Learning and development

In a global enterprise like JSPL, the key to sustainability is to foster a culture of collaboration and co-creation among our widely dispersed employee base. We are building an organization that is focussed on learning and leveraging its collective experience and expertise effectively.

This section related to managing the effect of our operations on our employees. For details regarding how we work with communities and society at large please refer to next section on sustainable world.
We drive a culture of learning and nurture industry-leading talent. We conduct business finance workshops, communication as a leader through neuro-linguistic programming (NLP), corporate theatre and speaker series by industry veterans. We also train specific need-based functional groups (aviation, teachers’ training and sales & marketing). JSPL follows globally benchmarked training practices, conducted by specialised internal and external trainers.

Based on the training needs identified as part of the Performance Development Review (PDR) process, mandatory trainings and trainings on areas identified by the respective managers training were conducted. During FY 13-14, 2,412 training programmes were conducted, resulting in over 42,891 employee-days of trainings. JSPL is consistently strengthening its training platform by adopting industry-best practices. The Company is also extending its training ambit for business associates and channel partners.

According to our training policy, we try to maintain a ratio of 1:4 for internal to external trainings. Corporate HR prescribes these trainings for different level of employees / plants, during the month of February and March every year. Based on the approved training calendar, the concerned process owners coordinate training design and delivery with concerned faculties / instructors / vendors to ensure appropriate customization of the training material. All participants of the training programme are provided with copies of training material so that they come to the training duly prepared. The effectiveness of our training programs is calculated as per Kirk Patrick Model on the basis of feedback received on the quality of training, and learning index.

\[
\text{Learning Index} = \frac{(\text{Post training test marks} - \text{Pre training test marks})}{(100 - \text{Pre training test marks})} \times 100
\]

Effectiveness of trainings is also evaluated by line managers based on job performance during performance evaluation. They report any performance issues related to the design and delivery of the training programme so as to enable the process owner to take corrective measures.

**Collective bargaining**

JSPL has always extended its support to its employees and contractors in their cooperative efforts to develop good relations and constructive bargaining practices. Human resource personnel are located at all the sites and interact with the employees and contractors about various services, measures and initiatives to assist them in creating and maintaining a workplace that is conducive for work. Jindal Steel & Power Factory Workers Union has been in place since 1994 at Raigarh for protecting rights of workers. 100% of non-supervisory permanent employees at Raigarh are members of this union. Apart from Raigarh, Jindal Steel and Power Mazdoor Sangha and Jindal Mazdoor Sabha, at Badkerjanga have been recognized at Angul. All arrangements with respect to collective bargaining and trade unions are as per applicable laws of the land.

### 4.2.2 Leadership development at JSPL

At JSPL, we are reinforcing the ecosystem for long-term value creation through empowerment of our people. We are targeting a top line growth of US$ 20 billion by 2020 by leveraging emerging opportunities. As an organisation, we are poised for turbo-charged growth; a new leadership pipeline needs to be created to propel this movement. We have, thus, launched a series of leadership development initiatives at JSPL. These include both in-house and external training programs. During the year, we have nominated employees to attend prestigious executive programmes, such as IEDPM (International Executive...
Diploma in Project Management) and Pinnacle (Executive Leadership Development Programme).

- Leadership Exploration and Development (LEAD): The programme was first launched in 2012-13 for three batches, and in 2013-14, it was further offered to two cohorts targeting approximately 75 employees in the middle and upper middle ranks. The programme spans a six-months period with a three dimensional focus on Managing Self, Managing Others and Managing Business. Interventions include self-mastery to internalise leadership values, content modules for leadership development by providing new skills, breakthrough projects to deliver on stretch goals, coaching, peer learning and senior leader mentorship through development councils.

- Young Leaders Programme (YLP): We launched the first batch of the Young Leaders Programme (YLP) in January 2014, targeting first time managers. Like LEAD, YLP will focus on leading self and leading others to build effectiveness.

### Workforce break-up by type

<table>
<thead>
<tr>
<th>Country</th>
<th>Permanent employees</th>
<th>Contractual employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>8,594</td>
<td>8,780</td>
<td>17,374</td>
</tr>
</tbody>
</table>

### Permanent Employee break up by gender

<table>
<thead>
<tr>
<th>Country</th>
<th>Permanent employees</th>
<th>Contractual employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>6,820</td>
<td>254</td>
<td>7,074</td>
</tr>
<tr>
<td>Oman</td>
<td>449</td>
<td>18</td>
<td>467</td>
</tr>
<tr>
<td>South Africa</td>
<td>194</td>
<td>43</td>
<td>237</td>
</tr>
<tr>
<td>Total</td>
<td>7,463</td>
<td>315</td>
<td>7,778</td>
</tr>
</tbody>
</table>

### Permanent Employee break up by age

<table>
<thead>
<tr>
<th>Country</th>
<th>Less than 30</th>
<th>Between 30 to 50</th>
<th>Greater than 50</th>
<th>Total</th>
</tr>
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<tr>
<td>Oman</td>
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### New joiner break-up by gender and age

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### Attrition break-up by gender and age

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<td>11</td>
<td>24</td>
<td>64</td>
<td>9</td>
<td>106</td>
</tr>
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^a This includes Angul, Barbil, Raigarh(Steel,Cement,Mines), Raipur, DCPP, Tensu, JPL Tamnar (4X250,4X600,Mines), JSPL corporate office, JPL Corporate office and Patratu. There are no temporary employees at these sites. Our operations in Oman and South Africa employ 467 and 237 employees respectively.

^b This includes Barbil, Raigarh(Steel,Cement,Mines), Raipur, DCPP, Tensa, JPL Tamnar (4X250,4X600,Mines), JSPL corporate office, JPL Corporate office and Patratu.

^c This includes Barbil, Raigarh(Steel,Cement,Mines), DCPP, JPL Tamnar (4X250,4X600,Mines), JSPL corporate office and JPL Corporate office.

^d This includes Barbil, JPL Tamnar (4X250,4X600,Mines), JSPL corporate office and JPL Corporate office.

^e This includes Raipur only for Indian operations.
Occupational Health and Safety

JSPL realises the fact that it functions in a sector which exposes our employees and communities to a wide range of hazards or workplace activities or conditions that could cause incidents, injury, death, ill health or diseases. We have put systems (such as OSHAS18001) to protect and promote the safety and health of our workers. We comply with the measures to be taken regarding hazards or risks to safety and health from the production of iron and steel, including national and international standards, codes and guidelines such as Factories Act, 1948; Mines Act, 1952; The Motor Transport Workers Act, 1961; Coal Mines Labour Welfare Fund Act, 1974 and Mines Labour Welfare Fund etc.

It is our aim to become an employer of choice, because of which safety is high on our agenda. This is evident by the involvement of the Board in safety related matters. At the Board level, safety related aspects are discussed by the HSE-CSR Committee which oversees the implementation of safety policy from time to time. The Committee also monitors safety performance with respect to injuries fatalities and other parameters along with the related legal obligations.

We have dedicated teams of highly qualified, experienced and skilled health and safety professionals available at all locations. The company’s corporate health and safety department holds the overall responsibility of administering and monitoring of health and safety initiatives. The Occupational Health and Safety (OHS) Department at JSPL works towards creating awareness, complying with all statutory obligations, formulating and implementing safe work practices, and ensuring safety of all employees and resources. These safety and occupational health practices are governed by the organization wise safety and occupational health policy.

Safety trainings

To upgrade the health and safety skills of employees, emphasis is being given on training. All new joiners undergo a ‘Safety Induction’ prior to entering any facility. All visitors are given a short ‘Safety Briefing’ on basic safety rules and are accompanied by guides during visits to the operational and project areas. In addition to internal classroom training, external experts are hired for specialised training programmes. The employees are also nominated for outside training to keep them up-to-date on recent health and safety related developments.

Internal safety trainings / seminars / workshops / toolbox talks with employees and workers are organized by the safety department at sites. During these sessions, the participants are trained and apprised of general safety rules & regulation, first aid, work permit system, firefighting, use of personal protective equipment and specific job related hazards and remedial measures. Certain need based trainings are also organized for introduction of safety rules and norms. On job trainings are also provided to employees and workers educating them about safety requirements for the tools, equipment, materials, and procedures they use every day or for particular jobs. However, it must be noted that these on-job trainings are additional trainings and do not replace formal trainings. Apart from trainings, safety related aspects are also imbued through safety bulletins and celebrating National Safety Week / Day and organizing safety competitions.

The department also ensures that labels / indicators / posters / tags / signs etc. related to safety aspects are appropriately displayed for making the employees aware about any potential dangers.

Occupational Health Centres (OHC) have been established at all sites, and are manned by highly qualified, experienced and skilled professionals.

Safety performance at a glance*

<table>
<thead>
<tr>
<th>Site</th>
<th>Lost time injuries</th>
<th>Fatalities</th>
<th>Lost Days</th>
<th>Frequency rate</th>
<th>Severity Rate</th>
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<td>3</td>
<td>20127</td>
<td>0.43</td>
<td>2885.06</td>
</tr>
<tr>
<td>Pataratu</td>
<td>3</td>
<td>0</td>
<td>570</td>
<td>0.52</td>
<td>99.21</td>
</tr>
<tr>
<td>Raigarh</td>
<td>6</td>
<td>3</td>
<td>18,266</td>
<td>0.42</td>
<td>860.94</td>
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<td>Tamnar</td>
<td>0</td>
<td>1</td>
<td>6,000</td>
<td>0.21</td>
<td>1237.37</td>
</tr>
</tbody>
</table>

* This includes data only from the Indian operations mentioned. Man-days have been approximated on the basis of leaves and not on actual man-days worked.
skilled doctors and associated nursing staff. A well-designed health surveillance mechanism is in place to cater to all employee requirements.

**OHS monitoring and review**

To ensure continual monitoring and review of safety procedures and practices three safety practices have been put in place – central safety committee, departmental safety committee, and contractor safety committee. Regular internal and external safety audits are carried out to identify potentially risky behaviour, activities and operations. All new projects and significant modifications to existing facilities are subject to detailed Pre Start-up Safety Review (PSSR) by multidisciplinary teams. Exhaustive quantitative and qualitative risk assessments are carried out by external experts. Control measures are implemented under a time-bound schedule against such identified risk situations. Of late, it has we have been working to sensitize and involve line managers in such audits and other health and safety initiatives.

**Safety by design:** We have also been working towards imbibing safety across project cycles starting from the design phase itself. The Company is ensuring that state-of-the-art safety technologies are adopted and implemented in upcoming projects. The process safety is also being focused upon to ensure safe operations.

### 4.3 Sustainable World

As leaders in the industry and responsible corporate citizens we are engaged in issues of national and global significance where we feel it is our duty to lead towards solutions.

JSPL does not toe the conventional line of being engaged only with social commitment to issues that affect our business. The boundaries of our concern and action go beyond the peripheries of our business and site locations.

#### 4.3.1 Around our operations

JSPL has ventured in backward areas where not many corporate bodies have reached. JSPL mitigates the ambiguities involved of doing so by trying to have inclusive and collective participation of local stakeholders. Our operations in states like Chattishgarh, Jharkhand, Odisha, and Africa stand as testimonies of intent on bringing development to newer areas. Today, we have been successful in developing such islands of development around our unit and are continually working towards increasing the radii of our developmental initiatives.

Working for society is an intricate part of how we conduct our business. Since its inception, we have been committed to the development of the society and especially the communities around its operations. This desire to bring about a positive change is reflected through the CSR programs which the company has taken up in the past years which have resulted in impacting about nine lakh people.

JSPL’s overall social commitment is focused around three visions:-
1. Education and Building the Nation of our Dreams
2. Health and population stabilization
3. Clean India / Green India

**Organizational framework**

Social commitment at JSPL ideates from its vision as well as the vision of our leadership especially the Chairman. This year, Chairman’s Vision Group (CVG) was formed (including Corporate Communications, Sales & Marketing, Power Projects, Environment Management, CSR, OHS, Finance & Accounts and Sustainability departments) which also plays an important role in determining key social initiatives.

CSR initiatives at JSPL are propelled by the Corporate Social Responsibility (CSR) Policy which lays down the key guiding principles of our programs. CSR activities are governed by the Board level HSE-CSR (Health, Safety, Environment-Corporate Social Responsibility) Committee which, apart from other health, safety and environment activities, recommends CSR expenditure to be incurred during the year for CSR activities, monitors the CSR Policy of the company and ensures that the activities as are included in the said Policy are undertaken by the company. In order to ensure greater transparency and accountability, the Committee is chaired by an independent director. The Committee met four times during the reporting period.

At a functional level, the CSR activities are headed by the CSR – Group Head at corporate office. CSR representatives at sites report to the unit head for administrative purposes and to the CSR head for functional purposes.

**Activities and reach**

The new Companies Act has mandated 2% of net profits (averaged over last three years) to be directed towards CSR activities. While the compliance requirements are at 2%,
JSPL has so far spent over 4% of our Profits After Tax (PAT) towards social activities for the reporting period. This is in a way also proof of JSPL’s genuine commitment to society. As our CSR policies and activities continue to evolve in line with international best practices, we would strive to remain an agent of positive change in the lives of our stakeholders.

Currently, we have implemented CSR programs in Oman, Africa and at all its Indian locations. Socio-economic surveys were conducted in Chhattisgarh (Raigarh, Tamnar, Raipur), Odisha (Angul, Barbil, Tensa) and Jharkhand (Patratu, Dumka, Godda, Asanboni, Jeraldabur) before taking up CSR interventions. Primary areas of intervention comprise of health, infrastructure development, education, livelihood, livestock, sports, art and culture. These interventions have been structured under three broad heads as discussed earlier.

Building the Nation of our dreams, includes a variety of activities including infrastructural development (such as construction / repair / renovation of roads, community centres, rehabilitation and resettlement colonies, rural electrification and other rural infrastructure), support to educational institutions by providing teachers from community to government schools, teacher trainings, learning material, scholarships, and improving and upgrading school infrastructure, developing and supporting vocational training and skill development, environmental conservation programs (such as watershed development, ground water recharge, solar street lighting etc.)

In the past, the impact assessment studies have been conducted by NABARD Consultancy Services (NABCOS) Private Limited for Angul and Raigarh locations. The report submitted by NABCOS noted that JSPL’s initiatives have “put an impact in the life of the Project Affected People (PAF)”. Over the continual efforts, their lives are “shaping up and transforming for better tomorrow. The CSR initiative of JSPL is becoming a movement which is expected to bring a great change among the lives of the PAF. Because the PAF have realized the disadvantages of their life and intent to move forward to new hopes and aspirations and PAF also hope that the JSPL’s CSR initiative will not be an end as a program but will sustain as movement of a system in a long term basis. The community has started believing that attitude of entrepreneurship will help them in the process instead of philanthropy and donation.” This marks the remarkable milestone which we have been able to achieve by bringing about a change in the thinking process of the people. These are baby steps towards making an India of our dreams.

Another important piece of the nation building through our initiatives has been affirmative action. We believe that businesses can play an effective role in the growth policy of the nation and fulfilling basic needs of the common people. We also realise that there are sections of society which have yet to be brought into the realm of India’s development. For this reason we have ventured into lesser developed areas, in spite of the set of the challenges they pose. Through our CSR activities, we attempt to make positive contribution to the lives of the under-privileged and vulnerable communities. We have supported a range of welfare projects, for such communities, encompassing community infrastructure, skill and mass education, micro-enterprises in agriculture and allied activities and healthcare. At Jeraldaburu, Jharkhand, our CSR programs are implemented in 10 villages covering about 1400 households with a population of 6500. 89% of these households are Scheduled Tribes (ST) while another 9% belongs to the Other Backward Castes (OBC) and 1% to the Scheduled Castes (SC).

* Through CSR activities conducted by the company and through donation made to other institutions
We have also worked for greater inclusivity of women by empowering them through livelihood initiatives. During the year, we supported 52 SHGs and 260 women by training them in tailoring and stitching, mehendi designing, manufacture of sanitary napkins and agarbattis. 416 women benefited from several training and production units of spice grinding, screen printing, making of everyday necessities (soap, pickles, phenyl and detergent) and revival of Donna-Pattal (art of making plates and bowl by leaves).

A nation that breathes well stays well – for JSPL caring for the environment is an important commitment that we have made to our country. We maintain green cover and practice rain-water harvesting at our units. Environmental conservation initiatives of JSPL are not limited to our premises but extend beyond. We have taken initiatives such as tree plantation and watershed development. Till date, we have planted 283,000 trees and developed 3700 acres under watershed development.

We have also been promoting sports and sportsmen who can promote our nation’s glory. During the year, we have reached out to over 900 youngsters through our sports related initiatives by encouraging boys and girls from youth clubs, schools, by supporting several tournaments and local events, ranging from cultural dance competitions, Kabaddi tournaments and athletic meets. We organized cricket and football tournaments which were very well received with a participation of over 12,000 players and spectators. We have also been working to keep our indigenous sports such as Kabbadi and Kho-Kho alive by organizing tournaments. During the reporting period, 40 teams from plant peripheral and coal mine area were encouraged to participate and compete in a regional Kabbadi tournament. We also provided financial assistance to boost six youth groups and 120 rural players for participation in several sports events.

Specially-abled people are often left behind in their right to inclusivity. We have been working in our small ways to empower the especially abled by engaging them in livelihood programs. Under the aegis of our program - Asha-The Hope, O. P. Jindal Vocational & Rehabilitation Centre has been established with an objective of catering to the needs of various categories of people with disabilities as per the classification of the persons with disabilities irrespective of caste, creed, gender or socio-economic variances. The centre provides therapeutic or educational rehabilitation and takes effective measures to engage them in sustainable livelihood programmes. The participants are trained in income generative vocational skills such as screen printing, candle making, tailoring and computers. They are also assisted in getting a disability certificate, pension, bus pass, loans through micro-finance schemes and other government benefits. In the past years we have been able to reach out to 4000 disabled-people, including more than 1600 children. About 600 people have benefitted through aids & appliances provided to them by the centre.

Health and population stabilization is an area which remains largely untouched as far as CSR programs are concerned. Population stabilization is propagated through various youth clubs, youth development centres, and adult literacy programs. Health and nutrition related initiatives include working on issues such as malnutrition, adolescent health, de-addiction women and child health etc. Apart from these health issues, CSR programs also included strengthening of anganwadi and baalwadi, conducting health camps, providing ambulance services, blood donation camps, distribution of tablets etc.

Angul is identified as ‘A’ category district by NACO for HIV/AIDS control programs. Considering its importance, Integrated Counselling and Testing Centre (ICTC) has been set up,
in collaboration and support from NACO, NRHM, District Health Administration and NACO appointed NGOs, for HIV/AIDS prevention and control. Over 75,000 people have been screened for HIV/AIDS and over 81,000 counselled through this ICTC. As a part of initiative, JSPL has undertaken motivational and awareness camps, street plays, film shows both in the villages and labour huts. As a part of the initiative condom vending machines were also installed at different strategic points like OHC, labour huts and material gate etc.

JSPL has been organizing village level blood donation camps in partnership with District Red cross Blood bank by involving the committed village youth clubs, village committee, Gaon Kalyan Samiti (GKS) and village opinion makers. JSPL is also providing health services through “Kishori Express” - a vehicle borne haemoglobin check-up kit for improvement of the health of adolescent girls - “would be mothers” through regular haemoglobin check-ups, awareness creation through ‘Kishori Pratibha software’ and nutrition supplementation by providing IFA and seed kits.

A Mother and Child Care Programme named ‘Aanchal’ in partnership with Zilla Swasthya Samiti, National Rural Health Mission and the District Administration is supported by JSPL towards reducing MMR and IMR and thereby stabilising/reducing the birth rate. Further, specialized Health care on dental, O & G and ENT camps have been organized in partnership with Government and contributed a lot for the community health care protection.

JSPL also celebrates all important days in collaboration and partnership with state, district, block and village level government Departments and NGOs.

Another major initiative in healthcare has been the Fortis OP Jindal Hospital and Research Centre at Raigarh. It is a state-of-the-art, 70-bedded Multi Speciality Hospital offering world class tertiary care. The hospital has four well-equipped operation theatres, super speciality units and differentiated specialised ICUs for cardiac, burn and neo-natal intensive care. The facility specialises in Cardiac and Neuro-Sciences, Ortho and Joint Replacement, Trauma, Intensive Care, Mother and Child Care.

At Tamnar location, Low awareness in women about health issues emerged as a major concern during the interactions with the community. It was found that this was due to lack of accessibility to health centres, unavailability of conveyance, absence of health education and information, and high rate of malnourishment, MMR & IMR. To overcome from these problems, 50 Village Health Volunteers (VHV) called ‘Swasthaya Sangini’ were appointed to address these issues. 45 awareness programmes were organised, in which more than 7000 people benefitted. The message was spread through lectures, role plays, street plays and cultural folk dances etc.
Clean India campaign comprised of water, hygiene and sanitation related programs such as providing clean drinking water facilities, construction/ renovation of toilets and sanitation facilities, and programs on maintain cleanliness and hygiene.

In the villages around Tensa mines, we have been organizing regular meeting with villagers to educate them on the benefits of individual household toilets. In order to further encourage people to build individual toilets, we have been providing financial support for construction of toilets. We have also been constantly interacting with the officials of water and sanitation department of Sundergarh to support construction of toilets through financial sanctions. A similar project was launched in Patratu, where awareness was created to stop open defecation. In collaboration with the state government and panchayat, construction of high quality individual toilets have been initiated. Hygiene awareness campaigns were undertaken in the villages around Patratu unit through Nukkad Nataks at 16 locations that emphasised on the benefits of cleanliness and hygiene.

Till now, we have provided sanitation facilities to 3,350 people and safe and clean drinking water access to 1,145 people.

### Status of Drinking Water & Sanitation in last 3 years

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<tr>
<td>13</td>
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<tr>
<td>Total</td>
</tr>
</tbody>
</table>

- **Clean India** campaign comprised of water, hygiene and sanitation related programs such as providing clean drinking water facilities, construction/ renovation of toilets and sanitation facilities, and programs on maintain cleanliness and hygiene.
- In the villages around Tensa mines, we have been organizing regular meeting with villagers to educate them on the benefits of individual household toilets. In order to further encourage people to build individual toilets, we have been providing financial support for construction of toilets. We have also been constantly interacting with the officials of water and sanitation department of Sundergarh to support construction of toilets through financial sanctions. A similar project was launched in Patratu, where awareness was created to stop open defecation. In collaboration with the state government and panchayat, construction of high quality individual toilets have been initiated. Hygiene awareness campaigns were undertaken in the villages around Patratu unit through Nukkad Nataks at 16 locations that emphasised on the benefits of cleanliness and hygiene.

- Till now, we have provided sanitation facilities to 3,350 people and safe and clean drinking water access to 1,145 people.
International operations

We are an Indian MNC with global footprint and treat the entire world as one family. We care for all who are affected by our operations, which delimits our CSR activities to an international level. Apart from India, we have CSR operations in Australia, Oman and parts of Africa. In Oman, focus remains around education and health related activities. In Africa, the focus is around entrepreneurship development, health, education and infrastructure development. Our enterprise development initiatives have been around brick making and farming activities. We have partnered with Vumani Sisebenze for projects on brickmaking in the Anninspruit community and initiated soya and maize cultivation in Kwangema community. Other projects in Africa include providing clean drinking water by facilitating boreholes in Mpumalanga province, road grading, health clinic at site (which is open to community), distributing supply to local clinics and healthcare centres, internship and on-job programs, improving school infrastructure, and busary schemes to benefit young junior degree students pursuing studies in the mining and engineering profession.

At Oman, we have conducted CSR programs in healthcare, education, infrastructure, sports and culture. We organised various camps like eye camps for adults and children, blood donation camps, cholesterol check-up camp, ENT camps, BP monitoring camps, etc. We also worked towards improving school infrastructure Nabar, Liwa and Sohar areas.

4.3.2 Beyond our operations

The boundaries of JSPL’s social commitment go beyond the peripheries of just our business and site locations. This is because JSPL is driven by a unique strong moral compass towards social commitment, and further as a leading global business conglomerate we feel responsible for the well-being of people and the planet. The company has therefore been successful in bringing about large tangible change on a few specific issues that are not always directly related to our business.

Right to hoist the Indian Flag

JSPL’s Chairman Naveen Jindal advocated to convince the Indian government to provide Indian citizens the right to hoist the Indian flag. In year 2002 he established the Flag Foundation. On 23rd January 2004, the Supreme Court of India ruled in favour of JSPL Chairman Naveen Jindal and cited a new fundamental right that would allow every Indian to hoist the national flag on all days of the year. One of the primary objectives of the Foundation is to instil in the citizens of India, a sense of pride in the Tiranga. In order to spread the symbolism of the Tiranga, the Flag Foundation uses all available mediums such as music, art, photography, cultural programmes, festivals, seminars and workshops. This also includes collaborations with other civil societies and advocacy groups, corporate houses, educationists and other like-minded individuals, with a special focus on children and youth.
Acceptance for Indian Rupees at Duty Free shops

Also after 3 years of advocacy, on 26 September 2005 JSPL’s Chairman Naveen Jindal successfully convinced the Indian government that Indian Rupees must be accepted at Duty Free shops at Indian airports. Previously Indian citizens could pay only in USD at these shops.

Citizen’s Alliance for Reproductive Health and Rights

Further, on 1 February 2012 JSPL’s Chairman Naveen Jindal created the Citizen’s Alliance for Reproductive Health and Rights. This initiative brings together Members of Parliament, civil society members and media persons, to ensure that every child is wanted, that every child-birth is safe and that every mother is healthy. It reinstates women as decision makers in family planning. It is based on the belief that only when all segments of society come together and collectively seek change that maternal mortality and infant mortality in our country can be prevented.

O.P. Jindal Global University

Education has been another field where JSPL has been a trailblazer. JSPL initially set up education institutions to provide relevant vocational skills to local inhabitants around its operations, but this endeavour has quickly grown far beyond the boundaries of JSPL’s business interests.

In January 2009 the O.P. Jindal Global University was established in Sonepat to impart globalized education with a view to producing world-class professionals, scholars, business leaders and academics in law, management and other disciplines. JGU is a non-profit global university established by the Haryana Private Universities (Second Amendment) Act, 2009. JGU has established five schools: Jindal Global Law School, Jindal Global Business School, Jindal School of International Affairs, Jindal School of Government and Public Policy and Jindal School of Liberal Arts & Humanities. These subjects are beyond JSPL’s business areas, and Sonepat as a location is also unrelated to the company’s operations. Activities of OPJGU during FY 2013-2014 included several seminars including a roundtable discussion held in November 2013 on human rights in India of the transgender people, hijras, and other gender non-normative gender groups.

Participation in Global Forums for Impact

JSPL has also been actively engaged on global forums with a mandate for impact. For instance on 8 May 2013 JSPL was represented at the plenary session of the World Economic Forum Africa Summit “Building with the BRICS”, alongside South African President Jacob Zuma; Nkosazana Clarice Dlamini-Zuma, Chairperson of the African Union Commission; and representatives from the International Monetary Fund. The panel examined how collaboration with Brazil, Russia, India, China and South Africa can empower Africa to deliver on its promise of growth and economic transformation.
5.0 Case Studies

Below are 5 case studies that each showcase unique and innovative aspects of JSPL’s business sustainability.

5.1 Case study 1: Sustainable business

JSPL sets an example of how despite its large size the company is in essence a social enterprise. Led by example by JSPL’s top management, as a priority JSPL has a strong commitment to society embedded in its business model. JSPL’s commitment to society, ethics, and development is the driver of JSPL’s business. This commitment has not deterred JSPL’s growth either which has only expanded over the years.

This case study enlists the factors that have facilitated JSPL’s business growth to be driven by societal impact.

Top leadership walks the talk

JSPL’s Chairman Naveen Jindal is also a politician which makes him closer and sensitive to people and their needs on the ground. Further, in the span of a year during 2012 -2013 JSPL appointed a new Chief Executive Officer as well as a new Chief Financial Officer, who were both global industry leaders and have brought in a wave of fresh thinking into the company. The leadership has since then walked the talk and has led by example.

Ethical business has been a priority where the leadership has set an example by publicly refusing to be a victim of extortion. A Chief Ethics Officer was appointed and across the company there has been a wave of even more strict adherence to doing business ethically, despite the external critiques and roadblocks to do so.

The top management has also pro-actively chosen to embed diversity within the core business by integrating a diverse set of voices in decision-making and thereby increasing the chances of more well-rounded key business decisions. The leadership has taken an approach of mentoring and then empowering young leadership to take on key roles within the business. Also in some cases female leadership have been provided strong mentorship and sponsorship from the top management to set them up for success. JSPL’s top management has consciously also balanced between local and non-local executives on site. Cutting across hierarchy, age, gender, every employee is being increasingly empowered to communicate freely to top management. This approach ensures that business decisions are more dynamic and well-rounded.

JSPL’s top management has also led by example on re-emphasising the value for time. For example JSPL’s Chief Executive Officer is most often the first executive to arrive on office premises. To establish a systems based approach towards business and financial management across JSPL, the Chief Financial Officer first re-organized JSPL’s production sites as Business Units each responsible for their own P/L. This has had a cascading effect on the company where production sites now take a more holistic and structured approach to their job at hand.

Anywhere in the world, affecting organizational change is most challenging in family owned businesses. A top-down approach to do so has worked in the case of JSPL, where clearly a dynamic and young Chairman and the company’s top management has led by example as a unified force in ensuring the way we do business is more organized, professional, and dynamic.

Socio-capitalist Business model

JSPL defines its performance as a combination of social impact, profits, and organizational effectiveness. More specifically the drivers for the organization’s growth path can be drilled down to the following – aspiration, social impact, entrepreneurship, innovation, and sustainability.

JSPL has a strong aspiration to grow in an authentic and holistic manner. This aspiration is backed by a logical, achievable growth vision plan that recognizes relevant organizational challenges and milestones. On the other hand the direct impact of JSPL’s business in providing steel, power, infrastructure at a large scale as well as the company’s ability to drive system-wide change in addressing social need. Despite its scale JSPL has retained its entrepreneurial spirit and its ability to do a lot with a little, especially in the last year’s increased emphasis on ‘multi-skilling’ its employees. Innovation remains in the company’s DNA with the organization’s continuous ability to generate game-changing ideas in its operations and social commitment. In these ways JSPL’s unique business model has a resilient income strategy to support its future growth plans in a way that it explicitly creates social impact as well.

Global in outlook, local at heart

In recent years including FY 2013-14, JSPL has increased its international assets, been a prominent influencer on global
agendas on platforms such as the World Economic Forum, and has attracted top talent from overseas. At the same time it is focused also on local business issues of priority, communities around its operations, and socio-economic development of the areas they operate in. The work culture is a fine balance of absorbing global corporate best practices and channelling it towards local implementation.

Further, one of the cornerstones of JSPL’s corporate identity is Nation building. By the very nature of JSPL’s core business in steel, power, and construction infrastructure, the company has contributed in bringing the latest technologies from around the world towards developing every country that JSPL has its footprint in.

It is mainly for these reasons above that Sustainability at JSPL enjoys a unique place in JSPL’s organization structure, to ensure the group of companies is on a path of quality growth for the long term. It ensures internal business sustainability and longevity, as well as sustainability of all stakeholders such as the environment, health and safety of employees, and well-being of communities. The team of Sustainability Officers are embedded in all plant locations, led by a Group Chief Sustainability Officer who is also part of the Group’s CEO office reports in to the CEO for all matters, as well as to the Chairman on JSPL’s social commitment. This unique organization structure ensures that sustainability priorities can be well embedded in to the core business strategy.
5.2 Case study 2: Environment

Environment management has been a priority area for JSPL. We have been treading the difficult path of maintain our profitability without compromising on our efforts to reduce environmental impact. Through our innovations we have proved that environmental conservation and profitability is not an oxymoron if we apply innovation. The case study presented below proves the same.

Background

Direct-reduced iron (DRI), more commonly known as sponge iron, is produced from direct reduction of iron (in the form of lump, pellets or fines) by reducing gases produced from natural gas or coal. This reduction takes place at the temperature range 800-1050°C when reducing gases (primarily Hydrogen and Carbon-monoxide) react with the iron oxides to produce iron. The degree of metallization, defined as the extent of conversion of iron oxide into metallic iron, is 92-96% in a typical DRI process. This high percentage of metallization makes DRI a highly suitable input for steel making. The specific investment and operating costs of DRI plants are low compared to integrated steel plants and are more suitable for many developing countries where supplies of coking coal are limited. This holds true for India where most of the coking coal has to be imported.

Challenge

Natural Gas based DRI is highly efficient techniques of manufacturing sponge iron that has lower environmental impact. However, the challenge in this manufacturing technique is the availability of natural gas. At JSPL’s Angul site, the DRI-BF-Electric Arc Furnace route has been adopted for manufacturing steel. To overcome the challenge of non-availability of natural gas Coal to gas plant was set up. It uses high ash coal, available in the vicinity of the site, and converts it into Synthetic Gas or Syngas. It is the first plant of its kind in India and only the 2nd in the world.

Our Solution

At Angul, the Syngas, produced through the gasification process, contains methane, carbon monoxide, carbon dioxide, hydrogen and water vapour from coal, water and air. This process has lower impact on environment as compared to
During the gasification process, the carbon-dioxide emitted in the process is entirely absorbed back into the process and the hydrogen sulphide produced is entirely used for sulphur production.

Capital expenditure of setting up of the Syngas plant was high and had a gestation period of three years. However, this high investment is offset by the improved energy efficiency of the system, as compared to the conventional model of producing steel, and reduced environment impact in the long run. Another added advantage which we able to explore was the utilization of waste. All seven by-products of the Syngas plant are recycled through internal use or sold to external parties. This ensures health and safety of employees as well as local communities and environmental protection.

**Figure: By Products and their usage - Syngas plant at JSPL, Angul**

<table>
<thead>
<tr>
<th>By Products</th>
<th>End Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasification Oil</td>
<td>Recycled into the Coal Gasification plant</td>
</tr>
<tr>
<td>Rectisol Naptha</td>
<td>Recycled into the Coal Gasification plant</td>
</tr>
<tr>
<td>Clear Tar</td>
<td>Recycled to produce Tar for example for building roads. We are not yet selling this in the market</td>
</tr>
<tr>
<td>Phenolic Pitch</td>
<td>Recycled to produce fastening material in manufacturing of mineral plates</td>
</tr>
<tr>
<td>Depitched Tar Acid</td>
<td>Recycled to produce disinfectants and solvents</td>
</tr>
<tr>
<td>Ammonia</td>
<td>Recycled to produce urea and fertilizers</td>
</tr>
<tr>
<td>Sulphur</td>
<td>Recycled and sold externally</td>
</tr>
</tbody>
</table>
5.3 Case study 3: Education

JSPL has recognized education as one of the building blocks of any nation and consider it as a priority area for its CSR activities. With the aim of nurturing young minds and equipping them with knowledge for increased livelihood the company has supported and established numerous primary and secondary schools, community colleges, a global university and vocational training institutes.

These educational initiatives have been undertaken to benefit the communities the company is operating in, by helping to increase the literacy levels of these areas. Apart from these initiatives around the neighbouring areas, we have also worked beyond these surrounding areas to develop a more sustainable world.

The Company provided 332 community teachers to ensure a stable teacher-student ratio in Government schools, benefitting children studying in 160 schools. The Company’s initiatives benefited 4,542 students through the distribution of books and uniforms, reimbursement of annual school fees to the disadvantaged and provision of desks and benches. The Company organised three Teacher Training programmes in 11 schools for 152 teachers.

The O.P. Jindal Institute of Technology (OPJIT) at Raigarh offers 4-year undergraduate engineering programmes in mechanical, electrical, electronics, civil and metallurgy courses. Jindal Institute of Power Technology (JIPT) at Tamnar, Chhattisgarh

Our impact through education in figures

- O. P. Jindal Schools nurture 9,841 students in a learning environment
- Shri O.P. Jindal and Smt. Savitri Jindal Merit Scholarships were awarded to 682 meritorious students and 72 scholarships were awarded to ITI students
- Benefited children in 160 schools by providing 332 community teachers
- Distributed uniforms and books, facilitated annual school fees reimbursement to the disadvantaged, provided desks and benches, thereby impacting 4,542 students
- Organised Teacher Training programmes for upscaling educational standards for 152 teachers across 11 schools
- Organised Career Counselling for 3,764 students across 10 schools
- Renovated 11 Anganwadi Centres and provided better infrastructural amenities to 250 children in the 0-5 years age group
- Provided 695 students with additional coaching classes and 1,496 students with computer classes
trains students to undertake operations or maintenance of power plants of 100 MW and above capacity. O.P. Jindal Schools have, over the years, created a competitive learning atmosphere among 9,841 students and developed their interest to pursue higher education. O.P. Jindal Community Colleges (OPJCC) trained around 10,000 students during the FY 2013-14. Merit Scholarships were awarded to 682 meritorious students of peripheral schools and institutions and 72 scholarships were awarded to ITI students.

Vocational training institutions have been set up to prepare students for employment, entrepreneurship and further studies. The initiative has been taken up under the banner of O.P. Jindal Community Colleges (OPJCC), established at Angul and Barbil (Odisha), Godda and Patratu (Jharkhand), and Punjipathra (Chhattisgarh). The Company also operates four Industrial Training Institutes (ITIs) in a Public Private Partnership (PPP) Scheme of the Government of India.

In line with the mission of the Founder Chairman, Shri O. P. Jindal, JSPL set up the O P Jindal Global University (JGU), which is a non-profit global university established under the Haryana Private Universities (Second Amendment) Act, 2009. JGU has established five schools:

- Jindal Global Law School (JGLS),
- Jindal Global Business School (JGBS),
- Jindal School of International Affairs,
- Jindal School of Government and Public Policy (JSGP) and
- Jindal School of Liberal Arts & Humanities.

The educational institutions provide knowledge, skills, scholarships and empower students and faculty to meet the challenges and demands posed by globalisation.

We have also established Jindal Institute of Power Technology (JIPT) at Tamnar, Chhattisgarh which trains students to undertake operations or maintenance of power plants of 100 MW and above capacity.

**OP Jindal Community College: Skilling India for Work**

Luminary philanthropist and business stalwart Shri OP Jindal remarked, “Without the upliftment of weak and backward sections of the society, a nation can never prosper.” OP Jindal Community College (OPJCC) is the realization of his dream. Established in 2007 as OP Jindal Institute of Technology and Skills, OPJCC today comprises five community colleges located in Chhattisgarh, Jharkhand, and Odisha. Close to 9,000 people received skills training last year in short-term courses, on-job-training, skills gap training, and one- to two-year ITI certificate programs thus promoting social, economic, and educational mobility.

OPJCC currently has a pan-India enrolment profile with learners representing over 10 states, including Arunachal Pradesh. Whereas satellite locations in villages and at district level expand OPJCC’s reach, passed-out students placed in jobs across India and a few abroad extend the colleges’ impact. Yet much more remains to be done. The Government of India has set a Herculean target of training 50 crore people by 2022. Chronic mismatches between education and labour markets coupled with escalating school drop-out rates have left young India immobilized. We are losing valuable human potential and talent. Dashed hopes, frustrations, and growing restlessness prevail. Ironically, the skills development landscape has never looked brighter. From government and industry to civil society, there are numerous new or revamped skills development training and education initiatives, including an uptick in community colleges under the Ministry of Human Resource Development.
The Jindal Group is an early champion of the community college model. OPJCC represents a bold CSR investment in human development and a genuine commitment to India’s future. Each college has qualified instructors and well-established infrastructure for technical vocational skills education and training. Special programs targeting rural women advance inclusive growth and gender equity especially in construction trades. Student counselling, job placement assistance, soft skills training, job migration training, and after-care support make the transition from learning to earning seamless for OPJCC students.

OPJCC is building a unique and replicable model of vocational education and training focused on promoting employability at home and abroad. The college works with international partners in the USA and UK to ramp up global quality. To transform the lives of learners and communities, skills development at OPJCC means imparting technical and non-technical competences needed for a knowledgeable, productive, competitive workforce and civil society. This means developing raw, unskilled talent and up-skilling workers to semi-skilled, skilled, and highly skilled workers to imparting language and financial literacy and supporting self-help groups. In partnership with communities, industry, and government, OPJCC’s aims to:

- Prepare job-ready learners in market-demand sectors like construction, mechanical services, and healthcare through a variety of short- and medium-term government recognized certificate courses of 4 months to 24 months duration;
- Provide supervised, on-job-training linking vocational and soft skills education to real work experiences;
- Offer on-site skills gap training of contract workers, labourers, and land sellers through government sanctioned RPL (Recognition of Prior Learning) which is a global best practice to assess, document skills through certification, and elevate millions of people working in the non-formal economy like construction workers;
- Cater to the needs of industry through customized training of land sellers and sponsored candidates;
- Facilitate training of trainers, skills assessors, and vocational teachers; and
- Promote gender equity and inclusive development.

Community College and Skills Development

The community college model has potential to fill the skills gap and aspirations of millions of Indian youth. Community colleges in the USA, Chile, China, and other countries bridge secondary...
education and higher education, offering myriad vocational programs for job-seekers to professionals seeking refresher courses. Unlike traditional postsecondary institutions, community colleges have historically enrolled all learners irrespective of their prior education and socioeconomic background. Community colleges are called “democracy’s colleges”. The open door enrolment policy is a community college trademark that is particularly advantageous for educationally and economically disadvantaged populations.

OPJCC, like community colleges worldwide, provides a second chance for school drop-outs and others locked out of traditional educational institutions due to a complex web of social, economic, and cultural reasons. Our instructors know how to address the myriad needs of OPJCC students. The flexibility of community college programs makes it an ideal place to learn and earn, practice new skills in real-work settings, and gain the confidence, knowledge, and experience to start a business, fostering dignity of labour.

Currently, OPJCC programs are recognized by the National Skills Development Corporation (NSDC) and the Ministry of Labour and Employment (MOLE). The recently passed National Skills Qualification Framework (NSQF) calls for competence-based teaching and learning outcomes and national occupational standards (NOS). The shift to NOS means industry and education will have to work together to ensure knowledge and skills amount to employable youths. In 2011, OPJCC converted its existing programs to competence-based outcomes and took them to industry for validation. Our programs fall within levels 1-4 of the NSQF (see NSQF legislation, 26 December 2013). These four levels cover over 60% of India’s projected manpower requirements through 2022.

OPJCC students range from 16 to 45 years of age, the average fluctuates from 18 to 28 years of age depending on geographic location. Training includes character development, entrepreneurial skills, Hindi and English classes. Ongoing teacher training and professional development ensure a high level of instructional quality. Third party assessment through government sector skills councils is an added measure of quality and accountability.

**OPJCC Flagship Programs**

New initiatives are introduced based not only on assessments of local need but on strategic planning from a long-term viewpoint and international best practices. The needs are vast that practical realities and capacity feature prominently when taking decisions that are strategic, serve multiple communities, and are good for the company. Doing this right and doing the right thing is our motto. The construction sector in India need at least 50 million skilled workers by 2022. There is a paucity of construction skills training providers. This type of training is capital intensive, time consuming, and challenging. Our Chairman Naveen Jindal astutely identified construction skills training as a niche market for OPJCC. What a better way to build the India of our dreams!

Incubator Cells are established to facilitate small business development. An “earn while you learn” initiative, students work under the guidance of instructors to fabricate school and industrial items like benches, steel or wooden tables, lockers, etc.

- Training-of-Trainees is a national initiative to improve the quality of vocational teachers and civil supervisors. This effort is supported by OPJCC partners, Montgomery College (USA) and Dudley College (UK).
- OPJCC Construction Training Centre developed in partnership with L&T are preparing the next generation of highly competent, skilled workers for the global construction industry.
- On-Job-Training is a mandatory part of training to ensure certificate holders are knowledgeable about workplace norms, quality and production requirements, teamwork, housekeeping, and supervision.
- Recognition of Prior Learning targets the existing workforce to assess competencies as per the National Skills Qualification Framework norms followed by skills gap training to improve quality and productivity, use of model equipment and tools, and safety practices.
- Construction Projects are undertaken to provide students an understanding of the full cycle of civil contracts. Projects include construction of small sheds, boundary walls, to multi-story buildings.
- Maintenance Services encourage teams of students to work on repairing electrical equipment, small motors, and air conditioners.
- Centre for Excellence in Plumbing is a recent honor whereby OPJCC will train plumbing instructors and assessors for central India for the Indian Plumbing Sector Council.
- OPJCC Punjipathra is the only official construction skills assessment facility in the state of Chhattisgarh for the Construction Skills Development Council of India, and NSDC affiliate.
- OPJCC was the proud recipient of the FICCI/LeapVault Skills Champions of India Award in the Industry Category.
- In collaboration with JPL Tamnar, OPJCC launched a successful, international award winning training program for land sellers called “Utthaan”. JSPL Raigarh recently launched a similar program, “Ukharsh”.
- OPJCC is part of a team preparing an online postgraduate course for skills development professionals for NIRD.
5.4 Case study 4: Achieving Safety Excellence

At JSPL we believe in prioritising safety and health of our people and incorporating this as a value. Safety is embedded across the organisation and is an integral part of how we conduct our business. It is our continuous effort to make it an ever safe place. In the past years effective implementation of the safety policy at all levels so as to achieve zero harm was the aim. World class technology along with highest safety standards accounts for basic business ethics.

Challenge

Conventionally, safety is considered to be focused on equipment, housekeeping, tools, machinery guarding and as a responsibility limited to the safety department. Though this forms the foundation for achieving safe working conditions and a safe workplace, safety cannot be limited to this. At JSPL, we have put in place a robust system for safety management through Occupational Health and Safety Policy, standard operating procedures, instructions, safe methods of work, work permit system etc. However, in spite of these system and procedures, injuries have still happened at work. It was realised that safety performance levelled out after a while and employees had a tendency to revert back to old practices. For example, a tool-box talk illustrating correct handling techniques will result in correct techniques on the day of the talk; however, over time employees have a tendency to revert to earlier practices. These highlighted the need for reinforcing correct procedures and bring about a change in behaviour.

Solution

There are various reasons for unsafe behaviour – varying from pressure on production leading to compromised safety, use of short-cuts (as they are easier, simpler and save time), because of stress, fatigue and distraction, and also due to lack of supervision. These issues can be reduced, if not completely eliminated, by building a culture of safety. It has also been observed that effective safety culture can help in improving overall operational costs and efficiency of operations through reduced incidents.

At JSPL, we have recently started to improve on our safety culture by building on a culture of safety. This is driven by was on transforming the employees by introducing them to behavioural safety education, training and practices. The emphasis was on continuously strengthening safety culture in the organization through behaviour-based safety observation and feedback processes.

Observations provide direct and measurable information on an employee’s safe work practices. Therefore a system of reporting near misses and unsafe acts is also in place. Employees / contractors who observe and unsafe act are encouraged to report the same through the suggestion scheme drop box at all units. Respective HR department collects these suggestions and routes it to the safety department for their review. The safety department reviews the suggestions received and decides on the root cause. The department works with the respective plant to implement the corrective and preventive action to prevent any unsafe act. After the review, if the suggestion is found to be valuable, the observer is also awarded to promote greater involvement from the employees.

The safety department conducts audits at units to identify strengths and weaknesses of the current system, identify risks of personal injury, and promote employee participation and morale. The scope of the audit also includes proper and safe use of equipment and use of PPEs by employees. In case of employees using equipment without PPEs, the employees are issued warnings and memo letters. Counselling of the respective employees is conducted, by safety officers, which may be followed by safety trainings.

Behavioural safety at JSPL is driven through three key steps:-

1. Demonstrating OHS commitment and defining how we want to excel in safety performance: This is done through formal and informal communication regarding OHS. To achieve this effective communication, we have ensured that all our management systems have incorporated strong OHS values and are written and communicated in a manner that is accessible to all staff, as seen in business management manuals, visual symbols and objects and communications initiated by the OHS Head. The OHS Head further drives organizational safety values and accountabilities by asking senior management during meetings to indicate how they have displayed their commitment to safety.

At Patratu - Monthly Mass Safety Meeting” by all Department Heads are carried out in their respective departments in which they address their staff at shop floor/sites and encourage them to adopt safety norms while execution of daily work. Active employees are being rewarded on the spot for promoting safe work culture. This step had impacted a lot in improving the awareness level of employees by positive transformation in their behaviour.
2. Developing understanding amongst the employees and influencing them to adopt correct practices: Trainings and awareness sessions are conducted to update employees about the key safety related risks and opportunities for improvement. Employees are, also, awarded for identifying unsafe acts / practices / hazards.

At Barbil - A subtotal of 24 numbers of class room training programs including one seminar (external) was conducted with 614 employees. On the job trainings have been conducted. Overall across the group employees have undergone the trainings on various safety related topics.

3. Building an environment that supports and encourages safety behaviour: At JSPL we encourage safety behaviour and ensure that right safety practices are reinforced regularly. This involves experience and knowledge sharing by the trainers as well as the employees during meetings. In these meetings, each employee participates and shares his part of ideas and suggestions or lacking’s that could be improvised. Safety practices such as mock drills are also conducted once every quarter.

Although improving OHS is a shared responsibility, the demonstrated commitment of supervisors and reinforced safe behaviour for employees is vital to improving OHS. JSPL has embarked on this journey of improving safety performance through behavioural based safety initiatives. We encourage all employees to be our partners in making JSPL a leader in OHS performance, by greater commitment to safety.
5.5 Case study 5: Sustainable world

Our operating stations have an Environment Management Department (EMD) that is equipped with sophisticated instruments with Standard Operating Procedures (SOPs) in place as part of the ISO 14000 directives. These procedures ensure adherence to mandatory standards. Some of our green initiatives are:

**Controlling Air Pollution**
- Installed high efficiency pulsejet bag filters, electrostatic precipitators, scrubbers and dust suppression systems across various locations like DRI kilns, SMS, blast furnaces, submerged arc furnaces, coke ovens and sinter plants
- Installed 23 continuous online and 40 manual ambient air quality monitoring stations around the factory to monitor air quality, with real time data being linked to the Ministry of Environment and Forests (MoEF) and respective state pollution control boards
- Three mobile vans at Raigarh, Barbil and Tamnar monitor ambient air quality
- Waste gases burnt and heat recovered is used to generate power
- Fixed and mobile sprinklers suppress dust and fugitive emissions

**Controlling Water Pollution**
- JSPL consumes 4.3–4.9 m³/tonnes of water, well within the Corporate Responsibility of Environmental Protection (CREP) stipulations due to a recycle-and-reuse approach for conserving water, making our plants zero discharge units
- Recycling of waste water generated during coke oven quenching, blast furnace, DRI kilns and rolling mill back into the processes
- Installed cooling close-circuit effluent-recycling system
- Re-using waste water from SMS outlet, DM plant, Submerged Arc Furnace (SAF) and Sewage Treatment Plants (STP) in slag granulation, wet ash handling system, slag cooling and dust suppression and horticulture, respectively

**Effective solid waste management**
- Power generation from coal rejects fines and middling in AFBC boilers
- Reusing slag from blast furnace and fly ash for cement manufacturing and brick making
- Using SMS slag after granulation for road making

**Bio-degradable Waste**
- Installed 3 tonnes/day capacity bio-methanation plant, in association with the Bhabha Atomic Research Centre (BARC), Mumbai for bio-gas production
- Collecting and segregating bio-degradable waste from residential areas
- Installed paper recycling unit at Angul plant

**Biodiversity and Eco conservation**
- Organised tree plantation programmes, planting more than 2,83,000 saplings in 2013-14
- Distributed saplings and preserved and developed 3 million plants over the last decade
- Established Sanjeeveni botanical park, housing rare plants and foliage
- Established nurseries for in-house development of rare floral species
- Developed a bio-diversity nature park for exotic birds

7.4 mn+

Saplings planted till date
## 6.0 Awards, recognitions
for JSPL during FY 2013-14

<table>
<thead>
<tr>
<th>Site</th>
<th>Environmental excellence</th>
<th>Excellence in social commitment</th>
<th>Operational excellence</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angul</td>
<td></td>
<td>Award for women’s empowerment in Odisha presented by Padmashree Dr. Kiran Bedi</td>
<td>IMS certification for Central Utilities and Structural Steel Division</td>
<td></td>
</tr>
<tr>
<td>Barbil</td>
<td>Greentech Environment Award 2014 under the Gold category – Metal and Mining Sector for outstanding achievement in Environment Management</td>
<td>State Safety Award for Good Work Environment from the Directorate of Factories and Boilers, Odisha</td>
<td>Global HR Excellence Award-2014 under the category Organization with Innovative HR Practices in the field of Human Resource for Barbil</td>
<td></td>
</tr>
<tr>
<td>Pataratu</td>
<td>Greentech Environment Silver Award - Metal and Mining Sector</td>
<td>International Safety Award with Merit from British Safety Council, UK</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Raigarh  | Shristi Green Cube Award for environmental initiatives | Greentech CSR Award - 2013, in Gold category, for ‘Asha - The Hope’, our initiative for special children for Raigarh unit | - Greentech Safety Award 2013 in Silver Category in Metal and Mining Sector for outstanding achievement in Safety Management  
- Safety Certificate Award from the National Safety Council, India for Raigarh unit |                                                                       |
| Tensa    |                          | Excellence award in the 38th International Convention on Quality Circle 2013 held at Taipei. |                                                                       |                                                                       |
| JPL      | 14th Annual Genentech Award |                                                                       | - Bronze Safety Trophy from the National Safety Council, India  
- One of India’s few power plants with ISO-50001 certification and Energy Management standard i.e. EN ISO-50001 by M/S TUV NORD |                                                                       |
Sustainability is a new division at JSPL established in 2014, with the mandate to ensure that JSPL’s growth is speedy, authentic and holistic.

JSPL’s sustainability priorities going forward will be to ensure compliance on all sustainability related issues, identify solutions to gaps that affect JSPL’s long term business success at local plant sites, ensure JSPL’s raw material security, take forward JSPL’s 3 social commitments (Education; Health, Nutrition & Population Stabilization; Clean Country/Green Country) embedded in its core business, and ultimately spur innovation towards sustainable steel and power production.

JSPL’s Sustainability Strategy

Commitment to Speed, Authenticity, and Holistic Quality in JSPL’s growth driven by JSPL top Management

1. A robust and fully compliant sustainability function at JSPL
2. Future proof JSPL. With Location Heads and Function Heads identify solutions to gaps that affect the long term business success of JSPL
3. Drive JSPL’s unique 3 Social Commitments
4. Create linkages with appropriate industry networks for due diligence, investments, financing, business intelligence.
5. JSPL builds a strong brand globally
6. Sustainable steel & power product and process innovation

JSPL’s growth is speedy, authentic, holistic such that JSPL becomes a globally admired and successful industry leader in the long term*  
* JSPL’s Sustainability Vision
## 8.0 List of memberships and associations

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Association for Iron and Steel Technology (AIST) – India Member Chapter</td>
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<tr>
<td>2</td>
<td>CII</td>
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<tr>
<td>3</td>
<td>FICCI</td>
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<td>4</td>
<td>Assocham</td>
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<td>5</td>
<td>FIIMI</td>
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<td>6</td>
<td>Independent Power Producers Association</td>
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<td>7</td>
<td>Association of Power Producers</td>
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<tr>
<td>8</td>
<td>Pellet Manufacturer’s Association</td>
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<td>9</td>
<td>Steel Furnace Association of India</td>
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<tr>
<td>10</td>
<td>All India Manufacturers Association</td>
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<tr>
<td>11</td>
<td>BRICS Chamber</td>
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<tr>
<td>12</td>
<td>Coal Producers Association</td>
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<td>13</td>
<td>CRISIL</td>
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<tr>
<td>14</td>
<td>EEPC India (Engineering Export)</td>
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<tr>
<td>15</td>
<td>Fly Ash Association</td>
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<tr>
<td>16</td>
<td>ILFI (Infrastructure &amp; Logistics Federation of India)</td>
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<tr>
<td>17</td>
<td>PHD Chambers of Commerce</td>
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<tr>
<td>18</td>
<td>Sponge Iron Manufacturers</td>
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<td>19</td>
<td>India Lead Zinc Development Association</td>
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<td>Indian Iron &amp; Steel Sector Skill Council</td>
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<td>21</td>
<td>Alloy Steel Producers Association of India</td>
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<td>22</td>
<td>CEB Corporate Leadership Council</td>
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<td>23</td>
<td>United Nations Global Compact</td>
</tr>
<tr>
<td>24</td>
<td>World Economic Forum</td>
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</table>
9.0 Assurance statement

Ernst & Young LLP (EY) was engaged by Jindal Steel & Power Limited (the 'Company') to provide independent assurance on its Sustainability Report 2012-13 (the Report) covering the Company's sustainability performance during the period 1st April 2013 to 31st March 2014.

The development of the Report based on the Global Reporting Initiative (GRI) – 400 Guidelines (2012), its content and presentation is the sole responsibility of the management of the Company. EY's responsibility, as agreed with the management of the Company, is to provide independent assurance on the report content as described in the scope of assurance. Our responsibility in performing our assurance services is to the management of the Company only and in accordance with the terms of reference agreed with the Company. We do not therefore accept or assume any responsibility for any other purpose or for any other person or organization. Any dependence that any such third party may place on the Report is entirely at its own risk. The assurance report should not be taken as a basis for interpreting the Company's overall performance, except for the aspects mentioned in the scope below.

Assurance criteria

Our assurance is in accordance with International Federation of Accountants' International Standard for Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000), and our conclusions are for 'limited' assurance as set out in ISAE 3000.

Scope of assurance

The scope of our work for the assurance engagement was limited to review of information pertaining to environmental and social performance for the period 1st April 2013 to 31st March 2014. We conducted review and verification of data collection/ measurement methodology and general review of the logic of inclusion/ exclusion of necessary relevant information and data and this was limited to:

- Review of consistency of data/information within the report as well as between the report and source;
- Verification of the sample data and information reported in the following units:
  - Raisar (Chhattisgarh);
  - Tanera (Chhattisgarh);
- Execution of an audit trail of claims and data streams, on a selective test basis, to determine the level of accuracy in collection, transcription and aggregation;
- Review of the Company's plans, policies and practices, pertaining to their social, environment and sustainable development, so as to be able to make comments on the fairness of sustainability reporting.

Limitations of our review

The assurance scope excludes:

- Data and information outside the defined reporting period (1st April 2013 to 31st March 2014);
- Review of the 'Economic performance indicators' included in the Report which, we have been informed by the Company, are derived from the Company's audited financial records;
- The Company's statements that describe expression of opinion, belief, inference, aspiration, expectation, aim or future intention;
- Data, statements and claims already available in the public domain through Annual Report, Corporate Social Responsibility report, or other sources available in the public domain.

Our assurance team and independence

Our assurance team, comprising of multidisciplinary professionals, was drawn from our Climate Change and Sustainability network, and undertakes similar engagements with various Indian and international companies. As an assurance provider, EY is required to comply with the independence requirements set out in International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants. EY's independence policies and procedures ensure compliance with the Code.

During our review process, we observed that:

- The Company has followed the GRI 34 Guidelines for report compilation. There is scope for improving the completeness of reporting with respect to certain disclosure indicators viz. human resource (G4-19), (A1), meals (E403);
- The Company may strengthen its system for recording and reporting incidents and accidents (LA5) and ensure maintaining auditability of the same;
- The Company may further strengthen its internal review mechanism for sustainability data, for which efforts are already in place.

Conclusion

On the basis of our procedures for this limited assurance, nothing has come to our attention that would cause us not to believe that the Report presents the Company's sustainability issues relevant to its business.

Ernst & Young LLP

Sudhakar Das
Partner

Date: 16 December, 2014
Place: New Delhi, India

## 10.0 GRI Content Index

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