Table of Contents

1.0 Establishing JSPL’s Business Sustainability Division

2.0 The Top Priorities for Ensuring JSPL’s Business Sustainability in FY 2014-15

3.0 JSPL has a Business Sustainable Model

3.1 Sustainable Production Processes at JSPL

4.0 JSPL Practices Sustainable Business Processes

5.0 Sustainable Supply Chain

6.0 JSPL is Building a Sustainable World

7.0 Case Studies of JSPL’s Business Sustainability

8.0 Awards and Recognitions FY 2014-15

9.0 Way Forward

10.0 GRI Content Index

11.0 Assurance Statement
About the Report

Jindal Steel & Power Limited (JSPL) is an Indian business conglomerate with operations spread across India, the Middle East, Africa, and Australia. Its core areas are steel, power, infrastructure and mining. It has also a specialised machinery division for manufacturing equipment, steel foundry and pressure vessels.

This is JSPL’s second business sustainability report, authored in conformance with the latest Generation 4 set of Global Reporting Initiative (GRI) guidelines on sustainability reporting. Based on materiality assessment conducted in-house, information on eleven aspects has been disclosed.

JSPL is committed to annually reporting its performance on business sustainability and sharing it with all its stakeholders.

We welcome you to share your views, suggestions and feedback with us at minya.chatterji@jindalsteel.com.

Data Management Approach

In 2014, JSPL created a system for sustainability-related data collection and management. Using a bottom-up approach to data collation, it collects information from all data owners at its Indian, Mozambique, South Africa and Oman sites. Data owners in each department are responsible for providing and approving sustainability-related data and information pertaining to their department to the sustainability officer at the site location who, in turn, relays the data to the corporate sustainability team.

In FY 2014-15, JSPL has completed the first phase development of a fully automated portal for business sustainability performance management. This portal has been created for the purpose of collecting, analysing and benchmarking sustainability related data from different units spread across India, Oman, Mozambique and South Africa.

Assumptions and standard calculation methodologies for estimation and quantification of data have been used. For calculation of carbon emissions, emission factors provided by IPCC and Central Electricity Authority and Ministry of Power, Government of India have been used. Water, waste and electricity issues have been reported on an actual basis.

In order to provide a balanced perspective of performance in this report, we have discussed our key accomplishments, developments and initiatives during the reporting year.

There have been no significant changes in our operations / size / structure / ownership. Our supply chain has remained the same for the reporting period. However, sourcing options are currently under review and changes (if any) would be discussed in the next report.

Assurance

This sustainability report has been examined and assured by an external third party. The assurance statement is provided.
Steel, power, and infrastructure industries are the lifeline of India’s development agenda. The growth of these industries means that more people in India will avail of electricity, have houses to live in, and be better connected via good roads and bridges. Our business sustainability adds to India’s growth and prosperity. JSPL is in service to build the Nation of our dreams, with the support of and ultimately for the benefit of all our stakeholders.

JSPL’s 2nd Business Sustainability Report provides a data backed assessment of the resilience of our organization. It explains our sustainable business model, how we practice sustainable business and production processes, as well as tangibly lead the way in building a better world.

I invite you to read the report and welcome your comments, engagement, and participation in the work we do at JSPL.

- Naveen Jindal
Chairman, Jindal Steel and Power Ltd.

Message from Managing Director & Group Chief Executive Officer

Dear Stakeholders,

I am pleased to offer you Jindal Steel and Power’s 2nd Business Sustainability Report. The report is a data backed review of the specific actions taken by JSPL during the Financial Year 2014-15 as well as the priorities ahead to ensure that the company is on the path of speedy, holistic, and authentic growth.

During the year JSPL's business has focused more than ever before to produce the cost efficient steel. We have also taken a major step and diversified in to a new business line of construction materials of which the major raw materials are obtained from re-using waste generated by our manufacturing plants. This year we have established ourselves in new markets in India and in Africa, and have prioritised providing our customers with the highest quality of products and service. To secure our raw material sources, a dedicated Coal Management Group was established in the company. Further two new teams, Risk & Compliance Management as well as Energy Management, were set up to ensure the company’s sustainable growth. This year four new company policies for Human Rights Protection, Policy Advocacy, Stakeholder Mapping and Engagement, Product Life cycle Sustainability were incorporated at JSPL. Our innovations to develop and deploy technologies for producing steel in a more environment friendly way were the subject of a case study included in Global Compact Network India’s annual compendium of best sustainable business practices 2014-15, as well as an entire chapter in a book published by students at Harvard University after they visited our operations. I take this opportunity to also announce that in 2015 JSPL qualified and committed to be a Lifetime Member of the United Nations Global Compact; in continued service to improve the state of the world we have signed up as Foundation Member of the World Economic Forum; and we also became a signatory of the World Steel Association Sustainability Development Charter. At JSPL, social commitment lies at the core of our business. JSPL has founded and runs a slew of universities, training schools, community colleges, and schools in India. In August 2014 we founded a new university the OP Jindal University (OPJU), under an Act of Legislature in the state assembly of Chhattisgarh. Also I am personally engaged in the construction of high-quality community toilets in the villages surrounding our operations. The sanitation of these toilets is managed by local women volunteers.

Going forward we will continue to invest in our greatest asset – our people. In fact we have just embarked on a large scale project of multi-skilling every JSPL employee. Raw material procurement at economical prices and cost efficient production processes will remain our top priority, and we are excited about several technological and process enhancements in our production that will come through in the year ahead.

I encourage you to read our 2nd Business Sustainability Report that will further showcase to you the internal robustness of our company. You will find that JSPL stands on a strong foundation of values and single-minded commitment to our work with an emphasis on systems driven work processes. Such that challenges only serve as catalysts to further the growth of JSPL and all its stakeholders.

Regards,

Ravi Uppal
Message from
Chief Sustainability Officer

Dear Stakeholders,

Through our 2nd Business Sustainability Report we would like you to know JSPL better. We have made every effort here to provide you with a detailed account of the sustenance of our business, data disclosures and trends, as well as showcase the core identity of our company which is pivoted on nation building, strong social commitment, and emphasis on technology. We have also followed up on the issues highlighted in last year’s materiality analysis and inform you of the specific actions we have taken over the course of the year to overcome each issue.

The main highlights for JSPL’s business sustainability this year have clearly been i) the establishment of a Risk & Compliance team, and a dedicated Energy Management team, at every JSPL operation site. ii) ensuring 100% compliances and transparency via data collection, management, and disclosures. iii) incorporating 4 new group policies. iv) focusing our CSR activities to an agenda for education, health & sanitation, building development infrastructure. v) gaining credibility for our environment friendly production processes at the United Nations and Harvard University. We have also deepened our engagement with the World Economic Forum and the World Steel Association. vi) due to various policy related events in India this year, raw material availability at economical rates has been a foremost priority for JSPL. You will notice in this report that our business model has therefore evolved towards an emphasis on cost efficient steel production as well as further strengthening our sales services.

We also thought you would be interested to know about how life at JSPL feels like. At any time we are surrounded by colleagues with diverse backgrounds, speaking any of 58 different languages, working out of our 33 offices all over the globe, who are either ferried by chartered plane flying twice a week across our main India operations, or who are present via sophisticated telepresence facilities installed at our offices. There is a high sense of patriotism amongst employees across all sites. The Indian National Flag is hoisted prominently at all our premises. Employees like to wear flag pins and flag wrist bands. There is also an emphasis on a structured and process oriented working style, with an openness to adapt to new technologies and innovations. In this report we have also included some pictures of our townships where JSPL employees live. Also we thought it important to mention to you JSPL’s environment friendly and universal access office buildings.

You will further notice that social commitment is placed at the core of JSPL’s business. The upliftment of communities living in the regions we operate is of utmost importance to us. But it is also crucial for us to contribute tangibly towards solutions to global challenges, and ensuring that our products are used for a variety of socially relevant purposes.

I hope that you will enjoy reading our report.

Sincerely,

Miniya
Jindal Steel and Power Limited (JSPL) is a major business conglomerate in India with a significant presence in steel, power and infrastructure. With an annual turnover of over US$ 3.14 billion, it is part of the US$ 18 billion diversified O.P. Jindal Group. The company expands its horizons by increasing its production capacity, diversifying investments and leveraging its core capabilities, which enables it to foray into new businesses. Currently, it has several business initiatives running simultaneously across continents.

JSPL is led by its Chairman Mr Naveen Jindal, the youngest son of Shri O.P. Jindal. The company produces economical and efficient steel and power. From the widest flat products to a whole range of long products, JSPL today boasts a product portfolio that caters to needs all across the steel space.

It has the distinction of producing the world's longest rails of 121 metres, large sized parallel flange beams, high strength angle irons for transmission towers and high strength earthquake resistant TMT rebars.

JSPL operates the largest coal-based sponge iron plant in the world and has an installed capacity of 3.25 MTPA of steel at Raigarh in Chhattisgarh. A 0.6 MTPA wire rod mill at Patratu and a 1.0 MTPA bar mill at Patratu, Jharkhand have been commissioned. Among the facilities commissioned by the company recently are a 1.5-MTPA steel melting shop and a plate mill for making five-meter-wide plates at Angul, Odisha and a 2 MTPA steel melting shop at Oman. The company aims to expand rapidly and contribute substantially to India’s long term growth story.

About Jindal Steel and Power Limited

Women Commanding Heights at JSPL

JSPL an Inclusive Workplace

Women Commanding Heights at JSPL

Captain Sucharita is the Pilot of our Bell 429 Helicopter

Captain Asmita is the Pilot of JSPL’s Pilatus Private Aircraft

* Basis of JLMT joined in 2015-16

** Basis survey conducted in 2015-16. Please see page 31 of this report.

# Please see page 32 of this report
JSPL in Numbers

US$ 18 BILLION JSPL IS PART OF THE ILLUSTRIOUS US$ 18 BILLION OP JINDAL GROUP

US$ 3.14 BILLION ANNUAL TURNOVER OF JSPL IN FY 2014-15

6.75 MTPA INSTALLED STEEL-MAKING CAPACITY (GLOBAL AND INDIAN)

5.085 MW TOTAL INSTALLED POWER CAPACITY

22,000+* EMPLOYMENT OPPORTUNITIES WORLDWIDE

21 COUNTRIES STEEL EXPORTS

9 MTPA PELLET-MAKING CAPACITY

₹87.46 CRORES TOTAL CSR SPENDING IN FY 2014-15

50,000+ FAMILIES BENEFITED BY THE COMPANY

*Employees + Contractual Workforce (1US$ = 62.5908)

JSPL Operations at a Glance

RAIGARH

<table>
<thead>
<tr>
<th>Plant</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS</td>
<td>3.25 MTPA</td>
</tr>
<tr>
<td>BF</td>
<td>1.67 MTPA</td>
</tr>
<tr>
<td>DRI</td>
<td>1.32 MTPA</td>
</tr>
<tr>
<td>Plate Mill</td>
<td>1.00 MTPA</td>
</tr>
<tr>
<td>RUBM</td>
<td>0.75 MTPA</td>
</tr>
<tr>
<td>MLSM</td>
<td>0.70 MTPA</td>
</tr>
<tr>
<td>CPP</td>
<td>824 MW</td>
</tr>
</tbody>
</table>

BARBIL

<table>
<thead>
<tr>
<th>Plant</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pellet Plant</td>
<td>9 MTPA</td>
</tr>
</tbody>
</table>

PATRATU

<table>
<thead>
<tr>
<th>Plant</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRRM</td>
<td>0.60 MTPA</td>
</tr>
<tr>
<td>Rebar Mill</td>
<td>1.0 MTPA</td>
</tr>
</tbody>
</table>

OMAN

<table>
<thead>
<tr>
<th>Plant</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBI</td>
<td>1.5 MTPA</td>
</tr>
<tr>
<td>SMS</td>
<td>2.0 MTPA</td>
</tr>
</tbody>
</table>

JPL

<table>
<thead>
<tr>
<th>Plant</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamnar</td>
<td>2800 MW</td>
</tr>
<tr>
<td>Tamnar</td>
<td>600* MW</td>
</tr>
</tbody>
</table>

MINING

<table>
<thead>
<tr>
<th>Country</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Ore</td>
<td>3.11 MTPA</td>
</tr>
<tr>
<td>Tensa Mines (Domestic)</td>
<td></td>
</tr>
</tbody>
</table>

OVERSEAS Operations

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>Anthracite Coal</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Coking Coal &amp; Thermal Coal</td>
</tr>
<tr>
<td>Australia</td>
<td>Coking Coal &amp; Thermal Coal</td>
</tr>
</tbody>
</table>

Exploration / Development / BD

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mauritania</td>
<td>Iron Ore</td>
</tr>
<tr>
<td>Senegal</td>
<td>Power BDs</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Iron Ore</td>
</tr>
<tr>
<td>Namibia</td>
<td>Iron &amp; Manganese</td>
</tr>
<tr>
<td>Botswana</td>
<td>Thermal Coal</td>
</tr>
<tr>
<td>South Africa</td>
<td>Lime Stone</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Coking Coal &amp; Thermal Coal</td>
</tr>
</tbody>
</table>
Rails and Head Hardened Rails
JSPL is manufacturing the 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 QuickBuild 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, 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 has developed a new brand by the name of “Panther” for which the first product is the high-strength earthquake-resistant construction TMT rebars.

Our Steel Products

<table>
<thead>
<tr>
<th>Products Range</th>
<th>TMT REBARS</th>
<th>RAILS AND HEAD HARDENED RAILS</th>
<th>PARALLEL FLANGE BEAMS AND COLUMNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRUCTURAL STEEL</td>
<td>PLATES &amp; COILS</td>
<td>WIRE RODS</td>
<td>FABRICATED SECTIONS</td>
</tr>
</tbody>
</table>

---

Jindal Steel and Power I 15
Jindal Power Limited

Committed to the ‘Power For All’ initiative of the Indian Government towards ensuring 24x7, reliable and affordable power.

Jindal Power Limited (JPL), a subsidiary of JSPL, is one of India’s leading power generation companies. It is involved in various stages of operation, implementation, development and planning in thermal, hydro and renewable energy sector. JPL has the unique distinction of setting up India’s first Mega Independent Power Plant (IPP) in the private sector - 1,000 MW thermal power plant at Tamnar, Chhattisgarh.

JPL has further enhanced power capacity at Tamnar by 2,400 MW. The last unit of 600 MW was successfully synchronised recently, taking JPL’s total installed independent power capacity to 3,400 MW. This has made JPL the largest single location power producer in Chhattisgarh.

**Salient features**
- First power plant (4X250) MW in India to achieve ‘mega power’ project status in the private sector
- Water is supplied from Kurket river, which is 25 kilometre away from the plant
- A dam of 18-metre height has been built on Kurket river
- Coal was transported to the power plant, via a 6.9 kilometre (approx.) pipe conveyor belt in the reporting year
- The Company has established a 258 kilometre 400 KV double circuit transmission line from the plant to the PGCL sub-station at Raipur. Through this, power can be sold anywhere in India

**Upcoming Projects**
JPL has signed agreements to develop three hydroelectric power projects, with a combined capacity of 6100 MW in Arunachal Pradesh, in joint venture with Hydro Power Development Corporation of Arunachal Pradesh Limited (HPDCAPL).

The Company plans to develop a 1980 MW coal-based thermal power project near Krishnapatnam port in Andhra Pradesh.

**Key Highlights**
- Sets new benchmarks in India’s energy sector for early completion of Power projects
- Ranked as fourth best performing power station among 25 major operating stations in the country
- Commercial operation (cod) of unit 3 (600 mw) in January, 2015
- Successful synchronisation of unit 4 (600 Mw) in March 2015
- Saved 39.02 Mu energy with the completion of new energy conservation projects

---

Jindal Power Limited

**Overview of 3,400 MW power plant, Tamnar**

**The Largest Single Location Power Producer in Chhattisgarh**

---

Jindal Steel and Power | 17
Sustainability at Jindal Steel and Power Ltd. means ensuring the organization’s holistic growth with authenticity, such that we are able to support our organization’s long-term success as well as contribute significantly towards building a better world.

Business Sustainability department at JSPL was set up in July 2014 to help ensuring that the pace of growth of the company was matched with good quality growth. The vision was for JSPL to be a truly remarkable, global, and authentic organization where all stakeholders grow along with the company. As we started out to establish JSPL’s Business Sustainability department we were cognizant that JSPL’s sustainability must be defined by its employees and the company’s own vision for its own sustenance. Accordingly, we embarked upon a project of defining what sustainability specifically meant at JSPL via 3 sets of online surveys, meant for 300 pre-identified employees, and several brainstorming sessions with JSPL’s top management. Based on the results of these surveys and brainstorming sessions, we were then able to accurately define business sustainability at JSPL, and b) identify this new department’s top priorities for the year ahead.

This section of JSPL’s second Business Sustainability Report is a disclosure of the establishment and priorities of ensuring business sustainability at JSPL.

1.0 Establishing JSPL’s Business Sustainability Division

Sustainability has a different meaning at different organizations or even catalysing innovation. Therefore, as a first step, it was important to accurately define what Business Sustainability meant for JSPL. Sustainability at JSPL meant ensuring its holistic growth with authenticity, such that we are able to ensure JSPL’s long-term success as well as contribute significantly to building a better world.

We then organized a series of brainstorming sessions with JSPL’s top management. A set of external stakeholders were thereafter consulted. This process helped us clearly derive the meaning and priorities of business sustainability at JSPL. Sustainability at JSPL meant ensuring its holistic growth with authenticity, such that we are able to ensure JSPL’s long-term success as well as contribute significantly to building a better world.

Cast: A factor that critically determines the sustainability of an organization is where it ‘casts’ or places sustainability in its organizational structure. At JSPL we decided that the organization’s long-term, holistic, and authentic approach to sustainability could permeate through all its businesses and processes if Business Sustainability became a central coordinating node within the company. It needed to be cast in a manner that enabled it to coordinate different departments of the company, related to the company’s long-term success.

Conceive: Depending upon the maturity of an organization, sustainability has a different meaning at different organizations globally. For instance, it could mean ensuring company compliances, implementing Corporate Social Responsibility (CSR), preserving the environment, rolling out business strategy, or even catalysing innovation. Therefore, as a first step, it was important to accurately define what Business Sustainability meant at our company. We decided to search within the company itself for its meaning. We wanted to know what employees felt was a pre-requisite for JSPL to sustain itself as a business.

Accordingly sustainability officers, tasked with supporting all aspects affecting business longevity, were appointed at every site location. They report to the Chief Sustainability Officer who i) leads JSPL’s Business Sustainability department ii) as part of the CEO’s office assists him in coordinating across specific departments iii) reports to the Chairman on issues related to JSPL’s social commitment.

This unique organization structure ensures that best practices for the company’s business longevity are rolled out strategically in tandem with the company’s top management.

Collaborate: All sustainability officers have been trained in-house to undertake Business Sustainability related responsibilities. There is a virtual meeting held every Monday and Friday that brings together all sustainability officers and the corporate business sustainability team. Sustainability officers at each site clearly map out their own key stakeholders – these include colleagues who are relevant to the site’s business longevity, specific individuals amongst local communities, NGOs in the region, regulatory authorities, customers and specific media persons. Further, sustainability officers have been trained to interact regularly with their stakeholders in order to identify issues that impact the sustenance of business at respective sites. Information impacting business longevity is gathered in this way directly from sites through each site’s sustainability officer and reported to the business sustainability team during weekly virtual meetings.

The roadmap for specific actions required is drawn up after discussions with the concerned department or business unit head. Implementation of these actions is then rolled out by the CEO or by department and business unit heads.

Overall the Business Sustainability department plays its ‘change management’ role in adherence to three golden rules:

i) Every analysis must be thoroughly data-backed
ii) Road map for change must be drawn through a consultative process involving all relevant internal and external stakeholders
iii) Roll out ‘change’ with tact, friendship, and collaborative action amongst relevant stakeholders

Overcoming Materiality Issues

‘Materiality issues’ are those that are important to a company’s stakeholders as well as to its core business. At JSPL such materiality issues are mapped by its Business Sustainability department to ensure holistic and long-term growth of the company.

In September 2014, JSPL’s Business Sustainability team undertook an analysis of the company’s materiality issues for the first time. To do this the team first identified JSPL’s top 15 stakeholder groups who were directly or indirectly affected by JSPL’s activities and those who may have interests in the operations of the company. After that a consensus driven effort led to the identification of a set of materiality issues. Each of these issues have a direct or indirect impact on JSPL’s ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large. These materiality issues often have a financial impact on the organization as well.

22 aspects that were identified as material are presented in the materiality chart below. These issues have been discussed as disclosures that run through this report. Further, specific Global Reporting Initiative indicators that are relevant to each of the most critical 11 aspects are also disclosed in this Business Sustainability report.
Most Critical Materiality Issues for JSPL FY 2014-15

1. Regulatory Compliance
2. Corporate Governance
3. Waste Management
4. Raw Material Management
5. Training & Development
6. Energy
7. Occupational Health & Safety
8. Customer Aspects
9. Emissions
10. Community
11. Employment
Since 2014, JSPL has used this materiality analysis to build its business sustainability strategy, stakeholder communication, strategic planning, operational management, and capital investment decisions. Subsequently, key engagements have been developed by respective departments along with relevant stakeholders to overcome materiality issues. During FY 2014-15 we have taken the following steps to address JSPL’s most critical materiality issues:

Regulations
- All environmental and social compliances for the relevant statutory norms and existing consents to operate were thoroughly reviewed. Recruitment of Risk & Compliance Managers was initiated (and later implemented) at all JSPL group’s operational site locations.
- Establishment of the Internal Risk Management Committee was initiated (and later implemented).
- On 1 October 2014, JSPL introduced ‘Comply’, an automated online system, to check and record statutory compliances at our site operations.
- On 4 November 2014, the Investors & Risk Committee at the Board level was constituted, later it was separated to create 2 separate Board level committees: 1. Investors Committee 2. Risk Management Committee.
- A Risk Management Policy for JSPL was established and constituted for the company.

Energy
- Energy conservation initiatives at Tamnar have resulted in a total saving of 39.02 Million Units of power in FY 2014-15.
- Energy Management System ISO 50001 was established in Barbil and initiated at Raigarh, Rajpur and Angul. In this way all JSPL operations sites are now certified/in process of being certified for ISO 50001.
- Energy Managers were recruited at all JSPL group sites.

Occupational Health & Safety
- JSPL has evolved and published a detailed set of safety standards for all its workplaces in the form of a comprehensive handbook called Global Safety Standards.
- In FY 2014-15 JSPL became the only company in India to have a 60-metre Turntable Ladder, a fire fighting machine for fighting the fire at high rise structures and buildings.
- Accident frequency rate reduced by 18.59%.
- Accident severity rate reduced by 35.95%.
- Fatality rate reduced by 34.32%.
- Man-days lost on account of accidents reduced by 16.41%.

Materials Used
- In FY 2014-15 JSPL charted out a detailed raw material management plan. This is discussed comprehensively in the section on Sustainable Business Model of this Business Sustainability Report.
- A Coal Management Group was constituted internally at JSPL in February 2015.

Training and Development
- 24712 man-days of training was imparted to employees till the end of third quarter in FY 15.
- The Oman centre witnessed the introduction of the LEAD programme. Thirty of its employees are now a part of this programme. More details on this can be found in the section on Top Priorities for JSPL’s Business Sustainability of this Business Sustainability Report.

Corporate Governance
- In March 2015, the Company started the process of appointing a ‘Compliance & Risk Management Officer’ at each of its sites. An Internal Risk Management Committee was also established later.
- Employees were brought together and consulted at regular intervals. The Telepresence system has greatly helped this consultative process, facilitating interactions among teams across different geographies. Regular Telepresence meetings ensure that all decisions are consensual.
- Physical level meetings of JSPL’s Group Executive Committee were held on the following dates in 2014: April 7, May 9 and 20, July 24, September 8, October 14 and November 19. In 2015 a meeting was held on March 14. Also, a meeting of JSPL’s Senior Management Committee took place on June 14, 2014, bringing together 169 senior managers from across JSPL’s operations worldwide.

Community
- JSPL has set up 4 tele-medicine centres at Raigarh, Tamnar, Barbil and Angul during the year. See the Around Our Operations section of this Business Sustainability Report for more details.
- In August 2014, The O.P. Jindal University was founded by the Jindal Education and Welfare Society (JEWS). The university was established by an Act of Legislature in the state assembly of Chhattisgarh.
- 7 community toilets were built in Raigarh area, 2 school toilets were built in Angul, 6 community toilets were renovated and 1 new community toilet was constructed in Patratu, 1 community toilet was built in Jeraladabar, 1 community toilet was renovated and 1 new community toilet was built in Asaroboni. In Tamnar, 475 low cost single unit toilets and 9 school toilets were built.
- JSPL’s CSR programme focused around three themes: Health & Nutrition, Education and Community Infrastructure.

*This includes figures for Raigarh Steel Plant, Raigarh Cement Plant, JPL Tamnar, DCPP, Angul, Barbil, Patratu, Rajpur, Tensa, Olens/NGR for both JSPL and JPL as covered in our last business sustainability report 2013-14.
The Top Priorities for JSPL’s Business Sustainability

FY 2014-15 was JSPL’s first year of incorporating business sustainability as a core aspect of its operations. The first few months were dedicated to define and set up the Business Sustainability department as well as the team. Subsequently rolling into action, there have been a few important milestones achieved towards establishing JSPL’s success for the long term:

1. Establishing a Risk and Compliance Management team
2. Establishing an Energy Management team
4. Ensuring the company’s business model sustainability (with emphasis on JSPL’s raw material procurement plan and establishing structured business processes)
5. and instituting JSPL’s core identity and building the company’s brand around that.

Also JSPL’s CSR activities were focused on to 3 themes of:

1. Education
2. Health nutrition and population stabilization
3. Community Infrastructure

There was greater emphasis that JSPL’s social commitment of ‘clean and green country’ must be embedded in all aspects of its business. In this context, the use of new technologies for more environment friendly manufacturing processes were encouraged, and existing such technologies were showcased at important international forums such as the United Nations, World Economic Forum, World Steel association. Also in terms of employees’ safety, accident frequency rate was reduced by 18.59% and fatality rate was reduced by 34.32%.

In large part, these early milestones were achieved because of a clear prioritisation of needs. Once JSPL’s Business Sustainability department was established, the top priorities in FY 2014-15 for ensuring JSPL’s business longevity were decided in consultation with the company’s employees. These top priorities were then presented to the Group Executive Committee for review. This list of top priorities are disclosed below:

i) Ensuring 100% Compliances

JSPL is a law abiding and legally compliant company, and its management also strongly propagates this commitment. In FY2014-15 a complete review of all statutory compliances was undertaken. An online portal for managing compliances called ‘Comply’ was put in place, and employees across sites were trained on how to use Comply.

Further, in FY 2014-15 JSPL also initiated the recruitment process for a team of Risk and Compliance Officers located at every site (later implemented in FY 16). Later, an Internal Risk Management Committee was also institutionalized at the Corporate Office. Risk and Compliance Officers at each site report to the Plant Head as well as to the Internal Risk Management Committee. Tools for identifying the most important risks faced by JSPL were created, and each risk was assigned a risk owner, detailed risk mitigation steps, and risk mitigation timeline.

Ensuring 100% compliances is the top most priority for JSPL, and the company plans to continue efforts towards strengthening a) JSPL’s compliance management systems b) training programmes to shape employee mind set towards always fulfilling all their compliance obligations.

ii) Ensuring Raw Material Security

On 24 September 2014, the Supreme Court of India declared that the coal blocks allocated by the Government of India since 1993 were done in an arbitrary way. Subsequently 214 out of 218 coal blocks (including JSPL’s coal blocks) that had been allocated since 1993 have been de-allocated and are being auctioned/allotted in a phased manner through a competitive bidding process. While the coal blocks earmarked for private sector are being put forward for E-Auction, the coal blocks earmarked for Government Companies & State Governments are being allotted under a separate scheme.

In later sections of this Business Sustainability Report, we have provided full disclosures on the consequences of the Supreme Court’s declaration on JSPL group’s business sustainability. JSPL’s top management put in place a business plan for ensuring its raw material security ahead of the start of the re-allocation process of coal blocks. A Coal management Group was constituted within the company, whose objective was to procure coal both for steel and power business from the most appropriate & cost effective external sources of coal. In parallel JSPL participated in the government led bidding process of the coal blocks. In addition to the above endeavour, the newly formed Group is also vigilant about the new opportunities abroad.

*This includes figures for Raigarh Steel Plant, Raigarh Cement Plant, JPL Tamnar, DCPP, Angul, Bardil, Pananta, Rajpura, Tema, Dhofar/KCR for both JSP and JPL as covered in our last business sustainability report 2013-14.
In March 2015, JSPL was invited to the prestigious ‘Think Conference’ in Stuttgart, Germany to speak to a large global audience about its practice in life cycle sustainability of its products. During the conference JSPL was recognised for implementing industry best practices for achieving economic efficiency (innovation, energy efficiency, and productivity), social equity (education, health & nutrition, population stabilization, nation building) and environmental accountability (environment friendly steel production, biodiversity, renewable energy).

(iv) Building an Authentic Corporate Identity and Brand

The responses to a series of employee surveys, SMS campaigns, and workshops with employees and top management conducted by JSPL’s Business Sustainability department indicated that JSPL has in its very essence a breakthrough innovative spirit embodied by its founding father, the revered Mr. O.P. Jindal.

Innovation is intrinsically and deeply embedded in the DNA of the company, and so is the company’s mission of Nation Building, along with a strong sense of Social Commitment. As JSPL grows rapidly and diversifies in products and geographic locations, this is who JSPL is at its core.

The survey results showed that this spirit clearly lives on within the organization in the ways employees think and in everything employees do. The very nature of the industry JSPL is in as well as the company’s large size makes JSPL an important component in the growth story of every country JSPL is present in. The passion for building the Nation of our dreams drives JSPL on a daily basis. The company is also active on issues of national and global significance, and the survey responses also demonstrated that employees believed that as leaders in the industry and responsible corporate citizens we must continue to lead towards solutions for problems affecting the people of the world at large.

In 2015, JSPL’s coal gasification technology for steel production as one of the twenty-one best practices of sustainable business in India. A case study of this technology was published in a compendium that was launched at GCNI’s National Day held in India. A case study of this technology was published in a compendium that was launched at GCNI’s National Day held in India. The book containing this case study as a dedicated chapter on India will be published in September 2015. You will find a copy of the book chapter written by the students of Harvard and MIT in the ‘Case Study’ section of this Business Sustainability report.

On February 14, 2015, the Global Compact Network India (GCNI) included JSPL’s coal gasification technology for steel production as one of the twenty-one best practices of sustainable business in India. A case study of this technology was published in a compendium that was launched at GCNI’s National Day held annually. JSPL was invited also to speak about sustainable steel production at a panel discussion on the occasion of GCNI’s National Day conference held in Bangalore.

In March 2015, JSPL was invited to the prestigious ‘Think Conference’ in Stuttgart, Germany to speak to a large global audience about its practice in life cycle sustainability of its products. During the conference JSPL was recognised for implementing industry best practices for achieving economic efficiency (innovation, energy efficiency, and productivity), social equity (education, health & nutrition, population stabilization, nation building) and environmental accountability (environment friendly steel production, biodiversity, renewable energy).

The survey results showed that this spirit clearly lives on within the organization in the ways employees think and in everything employees do. The very nature of the industry JSPL is in as well as the company’s large size makes JSPL an important component in the growth story of every country JSPL is present in. The passion for building the Nation of our dreams drives JSPL on a daily basis. The company is also active on issues of national and global significance, and the survey responses also demonstrated that employees believed that as leaders in the industry and responsible corporate citizens we must continue to lead towards solutions for problems affecting the people of the world at large.

The survey results showed that this spirit clearly lives on within the organization in the ways employees think and in everything employees do. The very nature of the industry JSPL is in as well as the company’s large size makes JSPL an important component in the growth story of every country JSPL is present in. The passion for building the Nation of our dreams drives JSPL on a daily basis. The company is also active on issues of national and global significance, and the survey responses also demonstrated that employees believed that as leaders in the industry and responsible corporate citizens we must continue to lead towards solutions for problems affecting the people of the world at large.
On Authenticity
Over the last 50 years, more than a 1000 studies have attempted to determine the definitive characteristics of truly great, industry leading organizations. But the results have been at best inconclusive.

Research has shown that this is because each winning organization is a unique entity in itself. It was found that industry trailblazers introspect and establish their unique corporate brand identity on the basis of authenticity. They are true to what they are and do not try to be like some other.

In line with this reality, JSPL has built a unique brand identity for itself defined by Innovation in its DNA, its mission of Nation Building, and Social Commitment embedded in its business.

(v) Attracting and Nurturing Leaders

There is a strong emphasis at JSPL on nurturing young and diverse talent. The company is led from the front by the young and dynamic leadership of its Chairman Mr. Naveen Jindal. JSPL’s MD & Group CEO Mr Ravi Uppal takes personal interest in nurturing young leaders on a rolling basis in the CEO’s Office, providing mentorship and opportunities to learn from him. There is an emphasis on trusting young professionals with leadership roles in the company. For example JSPL’s Head of Strategy and Business Coordination as well as its Chief Sustainability Officer are both under 35. Today 27.1% of JSPL is less than 30 years of age.

Other forms of diversity include bringing in local/regional as well as foreign talent as well as encouraging recruitment of employees with varying educational backgrounds. The company has taken on the challenge of improving its gender ratio, by not only recruiting more numbers of girls in the company but also nurturing female leadership.

In FY 2014-15, JSPL has also brought in a few important domain experts, for which JSPL’s Human Resources team scouted globally to look for talent.

Emphasizing the company’s focus on innovation and technology, two new leadership positions of Chief Technology Officer (CTO) and Chief Innovation Officer (CIO) were created this year in the company, positions that were subsequently filled by Mr. Sabyasachi Bandopadhyay and Mr. Vipul Anand respectively. Further, JSPL’s Learning and Organizational Development team has been at the forefront of assisting the company to focus on developing an individual’s leadership potential and usually includes five coaching sessions, five functional training workshops and peer-to-peer learning segments. The second element requires each participant to deliver exemplary performance through a break-through project (BP) for six months focused on initiatives ranging from cost optimization, process improvement, strategic initiatives, and innovations. Driven by the head of the site location, the BPs are reviewed monthly. Once incubated in the LEAD programme, each of the BPs is implemented in the organization.

Trainee Programmes

In FY 2014-15 a batch of 16 trainees were recruited into a fast-track career development programme as part of the Jindal Lead Management Trainee (JLMT) Programme. The JLMT programme is specially designed to include orientation to the company and includes four months of project work at JSPL’s plant site in Raigarh, three months at the Jindal Power site in Tamar, three months at JSPL’s plant site in Angul and two week-long classroom sessions on steel making and power production. Thereafter, JLMTs are placed at different key positions in the company. JSPL also has the Graduate Engineer Trainee programme (no recruitment in FY 14-15), as well as a Management Trainee programme for 52 fresh graduates from business management institutes.

At all times there are on-going mandatory training activities that include behavioural, functional, as well as technical training programmes. The target man-days of training is three per employee. In FY 2014-15 approximately 700 employees attended the Employee Assessment Centre, an annual one-day assessment of each employee, which results in a detailed report on each employee’s strengths and working areas.

(vi) Maintaining Robust Internal Management Processes

During a year of changing external business and policy environment, business at JSPL operated smoothly. This was due to a systematic approach to business processes that was especially emphasised and led by MD & Group CEO Mr Ravi Uppal.

Strategic meetings and reviews happened at frequent intervals to ensure all employees at JSPL move together in unison. A two-day strategy meeting of JSPL’s Senior Management Committee took place in June 2014, which witnessed the participation of 130 of JSPL’s 169 senior most managers. All global and regional site locations of the company were represented at the meeting. Through FY 2014-15 a marketing meet was conducted every month involving the participation of all regional managers for sales and marketing at JSPL. Also, the MD & Group CEO Mr Ravi Uppal, held reviews with site-level leadership on site or through a video conference every month.

A focal area in FY 2014-15 was to digitise processes across the company. For example, the eNFA system now ensures that all Notes for Approval (NFA) are processed electronically. Also, iComply, which went live this year, is a system that helps the company ensure that all statutory compliances are not only in place but can be easily tracked on a password protected electronic dashboard. The first phase of the Sustainability Performance Management system is also now ready. All data concerning JSPL’s business sustainability is collected on a monthly basis and assessed electronically. The recruitment of a Group CIO this year led to the initiation of several new steps in the area of automation.

(vii) Motivating Employees to Provide Leadership on Issues Critical to the State of the World

Apart from CSR projects, employees at JSPL have piloted large-scale initiatives towards i) stabilizing India’s population;
Later sections of this Business Sustainability Report provide details on both these initiatives. JSPL’s Chairman Mr. Naveen Jindal continues to lead the Flag Foundation that places India’s National Flag in public spaces. As of March 31, 2015, the Flag Foundation of India has installed 40 monumental flagpoles of 100-feet height and 12 monumental flagpoles of 207-feet height, across India.

JSPL also leads in the area of providing quality, affordable education. It has two universities (OP Jindal Global University, Sonipat and the OP Jindal University, Raigarh), one training school (Jindal Institute of Power Technology, Tamnar) for power plant professionals; five O.P. Jindal Community Colleges in Odisha, Chhattisgarh and Jharkhand and four Industrial Training Institutes based on public-private partnership schemes with the Government of India. JSPL has also provided 332 community teachers to 160 government children’s schools at Raigarh, Tamnar, Nalwa, Angul and Patratu benefiting 5500 students.

Further, JSPL was invited for the first time to the World Economic Forum’s Annual Meeting at Davos in 2015. The motto of the World Economic Forum is to improve the state of the world Nations. Given the company’s interests in manufacturing steel, power, and infrastructure, JSPL is literally building Nations. The company continues to create economic value in every country where it operates and contributes to healthy ecosystems and strong communities.

**United Nation’s Global Compact and Jindal Steel and Power Ltd**

JSPL is a lifetime member of the Global Compact Network India and a life time member of the United Nations Global Compact. The Chief Sustainability Officer of JSPL is also a part of the Steering Committee for Sustainability of the Global Compact Network India. On February 14, 2015, the Global Compact Network India released a report on sustainability best practices of Indian and global companies. The report featured JSPL’s business case for sustainability and the opportunities utilized by the company for integrating sustainability, measurement of impacts. It also featured key initiatives taken by JSPL for addressing risks and challenges. Today, JSPL uses highly advanced technologies like a top recovery turbine. Its coal gasification plant at Angul attracted special focus in the report because of its low impact on environment as compared to conventional methods. The technology also allows utilization of wastes as raw materials for various applications.

*Languages Spoken by Employees at JSPL*

*Other Languages Spoken by Employees at JSPL*

*Survey conducted on 2015-16, 1671 employees participated*
In its judgment on August 25, 2014, the Supreme Court declared the allocation of coal blocks made through the screening committee and government dispensation routes to be arbitrary and illegal. Following this on September 24, 2014 the allocation of all 218 coal blocks except for the one allocated to SAIL, the other to NTPC and two to UMPPs since 1993, were cancelled. The Supreme Court allowed 42 mines, which were operational, to continue production till March 31, 2015. It ordered the allottees of these mines to make an additional payment at the rate of Rs 295 per tonne on the coal extracted.

JSPL has a Sustainable Business Model

This section of JSPL’s Business Sustainability Report explains how despite the events that followed this Supreme Court order, JSPL’s business model remains stable. It discloses the events that subsequently unfolded and their implications on JSPL’s business. Additionally, there were two more important enhancements to JSPL’s business model related to diversification in products and in global operation sites, such that JSPL’s business model during FY 2014-15 is described in the figure.
This section of the Business Sustainability Report is a disclosure of five enhancements to JSPL’s business model made during FY 2014-15, namely:

i) Evolution of raw material procurement model for production in response to new Government policy/decisions in India.

ii) Diversification of JSPL’s business portfolio of markets and products

iii) Cost efficient steel production

iv) Sustainable Supply Chain

v) Customer Centricity

i) Raw Material Procurement

What actually happened? Following the Supreme Court order, JSPL had to give up its coal mines that supplied coal to its steel and power operations in India. The organization also paid an additional levy of INR 3,089.25 crores (for the period from commencement of mining to September 30, 2014) and on the similar basis the Company has accrued additional levy of INR 118.01 crores (for the period October 1, 2014 to March 31, 2015) (Including the amount of JPL its subsidiary).

Thereafter, on October 21, 2014, the Coal Mines (Special Provisions) Ordinance, 2014 (now an Act) was promulgated to enable the allocation of coal mines to successful bidders. Bidders were shot-listed through two stage bidding process and the successful bidders were declared after conduct of E-Auction through Auction route kept for Private/Govt sector and blocks earmarked only to Govt sector were allotted to Govt through allotment process. All these allocations either through E-Auction or Allotment routes were based on End Use Plants. The objective of the Ordinance was to minimize any impact on core sectors such as steel, cement and power utilities, which are vital for the development of the Nation. However, end use of many of the blocks was changed causing substantial impact on core sectors. JSPL’s Utkal B1 coal block was consolidated with Utkal B2 block and the end use of the combined block was changed to power. However, as the original allotee, JSPL relied on Utkal B1 to feed its coal gasification plant in Angul to make environment friendly steel was actually made in-eligible to participate in Utkal B1 & B2. JSPL appealed this at the High Court and won a favourable judgement.

The High Court was of the view that the classification of end-use for the coal blocks involved in the present petitions as also the merger of the Utkal B-1 and Utkal B-2 needed to be reviewed in light of the observations by the Hon’ble High Court in its decision. The Court thus ordered the de-merger of Utkal B1 and B2 mines and directed that Utkal B-1 and Utkal B-2 be taken off from the auction process.

Subsequently, through the transparent bidding process conducted by the Government, JPL won two coal mines, Gare Palma IV/2 and IV/3 and Tara respectively. With this JPL secured about 322 MT of extractable coal reserves. However, Gare Palma IV/1 (won by Bharat Aluminium Company Limited), Gare Palma IV/2 and IV/3 and Tara were not allocated to the winning bidders by the Government saying that the bid did not reflect fair value. The company in press release said that “We fail to understand as our bid was much below the ceiling price during the reverse auction process and would make best efforts to engage with the coal ministry and Government authorities to present the facts”. Later the company decided to contest this decision in Hon’ble Delhi High Court which in hearing of March 26, 2015 observed
Coal for Power Business

JPL has an installed capacity of 3400MW in Tamnar, in the form of 3 End User Projects (EUP). EUP-I is for 4 x 250MW units, while EUP-II and EUP-III are for 2 x 600MW each. There is a Power Purchase Agreement (PPA) in place for EUP-II of 400MW (with Tamil Nadu) and 350MW (Kerala). Another PPA (medium-term) is in place for EUP-I of 200MW (Tamil Nadu).

Before the mines were de-allocated, EUP-I sourced coal from Gare Palma IV/2 and IV/3; EUP-II sourced coal from its linkage with Coal India Limited (CIL) and the partially operational EUP-III ran on imported coal. As stated earlier, JSP won Gare Palma IV/2 & IV/3 and Tara coal mines through a transparent bidding process managed by the Government. Had this stayed, the company would have changed its sourcing strategy such that Tara mines were to feed EUP-I while Gare Palma IV/2 & IV/3 would feed EUP-III. EUP-II would have continued with the current coal linkages.

More importantly, in our view No mine can be compared to each other because each mine is unique in terms of the amount of reserves it holds, it’s present status whether it is in production or yet to be developed, Peak Rated Capacity, logistics, strip ratio, calorific value and so on. Moreover, acquiring the Gare Palma IV/2 & IV/3 mines makes little business sense to any company other than JPL because as per approved Mine Plan, any bidder is required to produce 6.25 MTPA and there is no access to them except a rail head, which is 60 kms away, to evacuate huge quantity of coal.

However after it started operating this mine, JSP built a dedicated 6.9 km long pipe conveyor system to ferry the coal from the washery to JPL’s power plant. In the absence of such a facility, moving the coal would be a daunting challenge for any other company. The mine has a rating capacity of 6.25 million tonnes, which translates into 20,000 to 21,000 tonnes of coal per day. This would require 1,000 tippers of about 20 tonnes capacity round the clock—a clearly unsustainable proposition in the long run. Moreover, the tipper trips would have an adverse impact on the environment to the extent of 1566 tonnes CO2/year1 if the mine operated for 300 days a year. Such heavy traffic would have also resulted into number of road accidents causing lot of distress among the local villages.

JSP and JPL have worked on a detailed plan for sustaining coal supply for their production processes. As a first step the company has put in place a dedicated coal management group, which would design and implement a comprehensive coal procurement strategy. This group includes senior management, which would examine various dynamics including planning, sourcing and procurement of coal and ensuring logistics for its timely delivery.

Secondly, JSPL intends to meet its coal requirements through procurement of coal and ensuring logistics for its timely delivery. The company also intends to participate in subsequent rounds of coal block and linkage auctions.

Coal for Power Business

JPL has an installed capacity of 3400MW in Tamnar, in the form of 3 End User Projects (EUP). EUP-I is for 4 x 250MW units, while EUP-II and EUP-III are for 2 x 600MW each. There is a Power Purchase Agreement (PPA) in place for EUP-II of 400MW (with Tamil Nadu) and 350MW (Kerala). Another PPA (medium-term) is in place for EUP-I of 200MW (Tamil Nadu).

Before the mines were de-allocated, EUP-I sourced coal from Gare Palma IV/2 and IV/3; EUP-II sourced coal from its linkage with Coal India Limited (CIL) and the partially operational EUP-III ran on imported coal. As stated earlier, JSP won Gare Palma IV/2 & IV/3 and Tara coal mines through a transparent bidding process managed by the Government. Had this stayed, the company would have changed its sourcing strategy such that Tara mines were to feed EUP-I while Gare Palma IV/2 & IV/3 would feed EUP-III. EUP-II would have continued with the current coal linkages.

The company’s subsequent decision to overturn the result of JSPL’s successful bid is sub-judice as noted earlier. However it is important to note that even if the company had won these coal blocks in the e-auction, the Tara coal block would have been available to it for real production and use only after 18 months. Further, for utilization of coal from Gare Palma IV/2 and IV/3, the company needs to sign PPA. Due to this reason, in the budget for FY 2015-16 the company had made its operating plans without these coal blocks. This is why the rejection of JSPL’s winning bid for Gare Palma IV/2 & IV/3 and Tara coal mines does not have any immediate impact on JSPL’s business model.

According to the company’s operating plan three units of EUP-I (4x250MW) would run on a continuous, priority basis. If load is available, then the fourth unit will run as well. EUP-II (2x600 MW), which is covered by a coal linkage, will run at least 1 unit. It will operate its second unit subject to availability of load and coal. As for EUP-III (2x600MW), COD has been obtained for its first unit and the second unit has achieved full load. The two units of EUP-III would also run depending upon the availability of load and coal.

Coal for Iron and Steel Business

Because of its enhanced capacities, JSPL’s sponge iron production has grown by 26%, steel production by 25%, and steel product sales by 15% in FY 2014-15. JSPL has mustered an installed steel capacity of 6.75 MTPA. All its plants are fully operational and geared to scale new highs of production in FY2015-16.

To ensure raw material for these enhanced capacities, JSPL intends to reduce its DRI operations in favour of blast furnaces, thereby reducing its dependence on thermal coal.

(ii) Business Portfolio Diversification

In FY 2014-15 JSPL diversified its product portfolio by consolidating and expanding its construction materials business. This section of the Business Sustainability report provides an overview of this business.
**Speedfloor**

De-scaffold your site. Flooring Simplified.

JSPL brings to you **SPEEDFLOOR** - a lightweight suspended concrete flooring system, an innovative technology from New Zealand.

- **Floor cycle** - Time saving depending upon the system adopted
- **Cost effective** - Reduction in floor thickness, saving in foundation

**The Speedfloor advantage**

- Reduces dependency on labour
- Pre-punched holes for accommodating services
- Rapid construction
- Multiple floors at a time

**Product specifications**

- **Shoe**
- **Joist**
- **Hanging Angle**
- **Edge Angle**
- **Mesh**
- **Plywood**

**Flow diagram - Speedfloor Installation Process**

1. Speedfloor joist lifted into place
2. Lock bars slide into pre-punched holes to support the plywood shuttering
3. Lock bars placed approximately 300 mm apart to give plywood support
4. Plywood introduced from top
5. Mesh laid out and tied into place, concrete poured
6. 3 days after pour lock bar and plywood removed

More than 1 lakh square feet delivered.
Marquee Projects

Medanta Hospital, Gurgaon

Mrar Building, Bengaluru

G.D. Goenka University, Gurgaon

OPJIT Hostel, Raigarh

Race Club, Hyderabad

OPJCC, Raigarh

EPS Panel

Smart way to stay cool in summer and warm in winter

For load bearing walls (G+3), external wall cladding in traditional reinforced concrete structures, non-load bearing partition walls, floors and roofs.

Faster Construction over traditional

Saving in electricity consumption

Saving in foundation cost due to reduced structural weight

Bringing to India, renowned Italian building technology from Schnell

Expanded polystyrene sheet assembled together with welded wire mesh

EPS Panels are used in construction of

Industrial Townships & Colonies

Hostels

Staff Quarters

Mass Housing

Projects Executed

Residential Township, Anupul
Flow diagram - EPS Panel Installation Process

1. Installation of rebar anchors
2. Installation of the panel
3. Assembling the panels
4. Preparation for electrical and plumbing
5. Installation of the floor panel
6. Application of shotcrete

Light Gauge Structure (LGS)

Water Free | Aggregate Free | Cement Free | Construction
Innovative technology for single floor extension over existing RCC buildings
Time saving with respect to RCC Construction

The LGS advantage
Reduces labour dependency | Longer building life
Fire, Earthquake and Wind resistant as per design and location

Applications
LGS can be used in construction of:
- Modular and Industrial Buildings
- Low Rise Residential Buildings
- Villas
- Labour Camps
- Multi-Storey Residential Apartments
- Hospitals
- Schools

Galvanized cold formed steel section

Single Floor Extension over 50 year old RCC building
Site project office
Flow diagram - LGS Installation Process

1. Architectural and structural design
2. Foundation
3. Foundation with LGS panels
4. LGS panels skeleton view
5. GI Decking sheet, roofing
6. Paneling with gypsum board
7. PPGI sheet, exterior work
8. Finished building

Light Weight Aggregate (LWA)

Light weight | Eco-friendly | High thermal and fire resistance
High strength with low density
For use in structural concrete, bridges and highways

Physical properties
- Bulk Density (Loose) 800 to 900 kg/m³
- Aggregate Strength above 5 Mpa
- Aggregate Size 10 and 20 mm
- Fire Resistance Yes

Advantage over natural aggregate

<table>
<thead>
<tr>
<th>LWA (Kg/cum)</th>
<th>Natural (Kg/cum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate density</td>
<td>834</td>
</tr>
<tr>
<td>Concrete density</td>
<td>1400/1900</td>
</tr>
</tbody>
</table>

Applications
- Structural Lightweight Concrete
- Floor and Roof Screeds
- Roof Tiles
- Land Drainage
- Bulk Fill
- Precast
- Arrestor Bed
- Hortag
- Filter Media
- Refractory

Plant capacity of 300,000 cum per annum
JGRS (Jindal Global Road Stabilizer)

Road to the future with cutting-edge, eco-friendly soil stabilization technology

Hydration activated soil stabilising powder - re-engineers a wide range of soil
25 - 30% reduction in project cost
60 - 80% reduction in aggregate requirement
40 - 45% faster over conventional road construction

JGRS is used in

Highways
High Altitude Roads
Airstrips
Railway Embankments

The JGRS advantage

Increases the bearing capacity by stabilising the soil
Eco-friendly construction
Reduction in the thickness of the road layers
Uses locally available material and eliminates need for plant produced material (GSB, WMM)

Test Results of JGRS with different types of soils

<table>
<thead>
<tr>
<th>JGRS Stabilizer %</th>
<th>CBR (%)</th>
<th>IIT Kharagpur</th>
<th>IIT Roerkee</th>
<th>Road Lab, RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>3.6</td>
<td>66.8</td>
<td>7.4</td>
<td>-</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>2.7</td>
<td>60.9</td>
<td>9.3</td>
<td>-</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Silt</td>
<td>12</td>
<td>265</td>
<td>317</td>
<td>-</td>
</tr>
<tr>
<td>Silt</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sand</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sand</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gravel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gravel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JGRS Stabilizer %</th>
<th>UCS (Kg/cm²)</th>
<th>IIT Kharagpur</th>
<th>IIT Roerkee</th>
<th>Road Lab, RSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>7.3</td>
<td>29.7</td>
<td>26.9</td>
<td>-</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>1.9</td>
<td>23.8</td>
<td>32.7</td>
<td>-</td>
</tr>
<tr>
<td>Clay (CL)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Silt</td>
<td>16.3</td>
<td>26.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Silt</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sand</td>
<td>0.38</td>
<td>4.8</td>
<td>13.6</td>
<td>-</td>
</tr>
<tr>
<td>Sand</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gravel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gravel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Bricks

Jindal high strength fly ash bricks and concrete pavers

High Strength | Zero Breakage | Supreme Finish | Savings in binding mortar and plaster
Production capacity: 3.7 lakh bricks/day. Instant Delivery

Product specifications

<table>
<thead>
<tr>
<th></th>
<th>Jindal Bricks</th>
<th>Jindal Uni Paver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>3.2 to 3.6Kg</td>
<td>4 to 4.2Kg</td>
</tr>
<tr>
<td>Size</td>
<td>230 x 110 x 75mm</td>
<td>242 x 130 x 80mm</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>&gt;=100kg/cm²</td>
<td>&gt;=200kg/cm²</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>8-10%</td>
<td>4-6%</td>
</tr>
</tbody>
</table>

Jindal Panther Cement

Lahe se bana Lahe sa bana

Unmatched strength | High durability | Corrosion resistant

Applications

For constructions like:
- Residential
- High rise commercial buildings
- Underground construction
- Mass concrete works
- Heavy foundations
- Sea-shore constructions
JSPL’s Schnell home is an innovative and unique solution that makes it possible to construct environmentally friendly houses fast and at a low cost. Schnell homes come with heat insulation and as much as 60% heat dispersion. This technique of construction technique has been developed by the Italy-based Schnell group. The technology reduces construction time by more than 50% and the material used is fully recyclable, thus providing a much more eco-friendly option to the current traditional mode of constructing homes. It involves replacing bricks and blocks with polystyrene sheet panels, assembled with welded wire mesh. The panels are finished on site by pouring or spraying concrete to obtain different structures such as vertical walls, stairs and roofs. JSPL believes that in light of rapid urbanization and the growing need for housing among India’s fast multiplying middle-class, Schnell homes are clearly the way to go.

JSPL has constructed homes using this technology at Jindal Nagar, the township at its Angul location. This was the first application of the technology in Odisha and only the second in India. These homes are fast to build, environmentally friendly, strong and durable.

Diversification of Business by Strengthening Global Footprint

JSPL is diversifying its business also by capitalising on opportunities in high growth markets. In FY 2014-15 its footprint extended across Oman, South Africa, Australia and Mozambique.

In Oman (Middle East), the company has set up a US-$-500 million, 1.5-MTPA gas-based hot briquetted iron plant and a 2-MTPA integrated steel plant. The Oman facility uses cutting edge technology from Italy and is the country’s first and largest steel melting shop and third largest in the Middle East & Gulf region. The SMS was commissioned in a record 23 months from the date of commencement of the site work in 2012. Some key features of this facility are:

- Electric arc furnace (EAF): the world’s largest and first gravity hot DRI feeding system
- A 200-tonne ladle furnace, one of its kind in the Middle East
- The world’s first and largest continuous casting machine with a capacity of 2 MTPA
- Vacuum degassing furnace that enables processing of special steels on the furnace to cater to specific customer needs

On the African continent JSPL holds coal operations in South Africa and Mozambique. The South African mine is an underground anthracite mine, and remains a prominent producer of high quality anthracite and lean bituminous coal in South Africa. Across the border at JSPL’s Mozambican mine, extraction of both thermal and coking coal through an open cast mining method is achieved.

Being a corporate native of the emerging economic power of the Indian sub-continent, JSPL, came to the realization that its wide and inherent experience in the development of its home market can assist with stimulating a similar rise in Africa. The continent shares many similarities and shared history with India, which provides an unprecedented opportunity for both rising economic giants to march together into the future, for the mutual economic and social benefit of their respective peoples. Our African operations span through South Africa, Mozambique and our strategy has shown significant results in improving the quality of life for the people, while nurturing the environment that has produced good quality coal.

Going global has not only helped JSPL gain access to raw material supplies but also to find new markets. In FY 2014-15 JSPL’s global operation sites became more integrated with its business in India. Across geographies, JSPL works in line with a common culture, a standardized set of rules and processes and a coordinated approach with some degree of customization around local cultures.
**Transformation of Business - Machinery Division**

**Background:**

The Machinery Division of Jindal Steel & Power Limited (JSPL) was established in the year 1992 at Raipur in the state of Chhattisgarh. The division was developed with the intention of catering to the burgeoning demands of a rapidly growing JSPL. For years, this unit was supplying equipment to its sister units and played a major role in ensuring that the projects undertaken at various locations by the JSPL Group were catered to on a timely basis. Even though the unit acquired the scale and capability to venture outside, it focussed on serving its internal customers first as that was its primary responsibility. Even the machinery that was installed at this unit centred on supplying equipment to Steel & Power plants of JSPL Group.

**Challenge faced by Machinery Division**

Many of the projects in which the machinery division has supplied lot of equipment are in their final phases; thereby the demand for equipment from these projects are scarce. Since the demand from internal projects had started to reduce, machinery division was made to look outside for business. The need to get external orders to survive required the unit to undertake a dedicated approach towards product development and management as well as changing the manner in which it projects itself to the external clientele.

**Steps taken to meet the challenge head on**

In order to gain a foothold in the external market as well as to stay competitive, the unit decided to compartmentalise its product portfolio into the following five business verticals:

- Equipment for Steel Plants, Power Plants & Mines
- EOT Cranes
- Pressure Vessels & Heat Exchangers
- Ferrous Castings
- Bulk Material Handling Equipment

Along with setting up of business verticals, a dedicated business development manager has also been assigned to each and every vertical. This has ensured that each and every vertical is given equal weightage in terms of development and responsibility towards the growth of the vertical is well defined.

**Actions taken to improve visibility of Machinery Division**

Since a structured framework was developed to tap the external customers, the focus now began to shift towards improving the visibility of the Machinery Division leading to the following activities which would help it to enhance its image as a preferred vendor to the external customers:

- **Undertaking Registration process at customers**: Machinery Division has aggressively started to pursue enlistments at various customers.
- **Re-Launching of Newly designed website**: A detailed website has been developed for Machinery Division listing various business verticals ensuring structured information is available to the internal as well as external customers.
- **Brochures**: Business vertical-wise brochures are being created.
- **Emailer System**: A dedicated Emailer System has been developed to ensure that our external customers are aware of the latest product developments that take place at Machinery Division.
- **Increased Customer Interaction**: Customer Interactions & meets have been increased as well as customer visits to plants are being encouraged so that our capabilities are clearly understood by the prospective external customer.
- **Social Media**: JSPL Machinery Division is also trying to increase visibility by tapping the social media handles of JSPL Corporate Communications team. This shall ensure that Machinery Division figures prominently on all communications sent out by the JSPL Group.

The focus on increasing external customer contact and steps taken to improve visibility have just about started to bear fruits. This can be gauged from the fact that conversion rate of 26% for external customers was achieved.

<table>
<thead>
<tr>
<th>No. of External Customers Contacted</th>
<th>No. of External Customers from Whom Enquiries Received</th>
<th>No. of Customers from whom Orders Received</th>
<th>External Customer Conversion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 150</td>
<td>94</td>
<td>24</td>
<td>26%</td>
</tr>
</tbody>
</table>

Other than structuring its product portfolio, the unit also decided to leverage its competence in manufacturing varied kind of equipment by augmenting its product portfolio. This ensured that an enhanced product basket was available to its external customers and they were made to look at JSPL-Machinery Division as a vendor who could supply quality equipment for their varied requirements.
Impetus to Business Development Initiatives

In order to survive and stay ahead of the competition as well as to increase avenues of revenue generation, the unit has started to undertake various initiatives to search for new business opportunities wherever synergies with its existing facilities exist. Some of these business initiatives, still in the stage of infancy, are listed below:-

- Business of Refurbishment of Rolls for Steel Plants in collaboration with M/S Welding Alloys. This shall not only provide a new revenue stream but also ensure that Machinery Division helps in quick refurbishment of Rolls at its Raigarh and Angul units and in the process brings down the overall cost involved in refurbishment of rolls. Additionally, the unit shall also look to tap the external clients in this line of business vertical, once it develops the necessary scale and capability
- On-going Collaborations talks with various technological suppliers to strength its existing business verticals. The Machinery Division has entered into a technical collaboration with Kawasaki Heavy Industries (KHI) for the manufacture of Stacker Reclaimers for the Angul Project. Collaborating with a reputed technology partner will ensure that the Machinery Division creates a space for itself in the Bulk Material handling space once this project is successfully executed
- Developing a post-sale service ecosystem for its Field Engineering Services (FES) Team to provide a comprehensive solutions package and offering to its customers. Since the unit already undertakes commissioning and erection activities, the development of this post-sale service dimension shall ensure that the unit is able to provide holistic manufacturing and service basket to its customers and support relevant business functions

(iv) Cost efficient steel production

Since inception of the company there has been a strong focus on energy and cost efficient steel and power production at the company. Some examples of measures implemented to improve production efficiency during FY2014-15 are as follows:

1. Replacing Light Diesel Oil (LDO) with a by-product of Coal Gasification Process (CGP) namely, ‘Gasification Oil’ in Power Plant, Process Boiler and SMS; this thus avoiding additional procurement of LDO
2. 4 MW power generation achieved from the synthesis gas pressure recovery ‘Turbo Expander’ at the DRI Plant
3. Replacing LCOB refractory by Andalusite based refractory
4. Reduction of Fines generation by segregating through Magnet
5. Hot sponge iron charging to electric arc furnace at JSPL, Angul
6. Installation of back pressure recovery turbine in bulk furnace at Raigarh

This year, the evolution of JSPL’s raw material sources has laid greater emphasis on having efficient manufacturing processes. The company has taken on a goal that part of the profit margins that previously came from the company’s backward integrated business model must now come from greater efficiency in production.

However there are many parts such as processes, policies, skills, capacity that can be improved in order to increase efficiency. The management at JSPL were of the view that every improvement in performance and value to stakeholders results from a change in the organization, however not every change in the organization will result in an improvement in performance and value. Therefore the company first set out to build an understanding of exactly where to focus its resources to achieve the goal. This led JSPL to decide in February 2015 to:

- Deploy a turnaround strategy pivoted in the Theory of Constraints that would build greater efficiency in its production processes.
- Multi-skill its employees to increase manpower efficiency
- Multi-skill its employees to increase manpower efficiency

The Theory of Constraints stipulates five focusing steps: 1. Identify the system’s constraints. 2. Decide how to leverage the system’s constraints. 3. Subordinate/synchronize everything else to the above decision. 4. Elevate the system’s constraints. 5. If in the previous steps a constraint has been broken then goes back to Step 1. Thinking within this framework, JSPL’s management team drew out a plan to improve production efficiency on the basis of identifying, focusing, and improving a few parts in the production process that were assessed as not adequately performing at the desired levels. The plan would enable each part of the company’s operations to know not only what it must start doing to increase efficiency of the whole organization, but also what each part must stop doing that is not contributing to efficiency.

It was further planned (and later implemented in FY 2015-16) to deploy a dedicated ‘Theory of Constraints Team’ each on the plant sites at Raigarh and at Angul. These two teams had the mandate to conduct a data backed study of where the weakest link in the production efficiency on their site operations lies, then propose a solution to improve efficiency of that link. It was also planned to have several consultative workshops on the Theory Of Constraints across the company, so as to procure the buy-in from every one towards the specific steps required to implement change. Key management personnel were also to be provided with the book Eliyahu M. Goldratt, The Goal: A Process of Ongoing Improvement. The company’s management was of the view that people only resist change when they do not see the value in the change for their own selves. The consultative workshops were therefore crucial to communicate to employees that the changes will be a win for all stakeholders, so as to plan together and turn any resistance to enthusiastic change.

As a parallel process, in March 2015 JSPL also decided to embark upon an initiative called Process Based Organization, whereby every employee would be trained on two or three skills in addition to the employee’s core competency. This multi-skilling programme is to be boosted with a detailed assessment of team structures and productivity across the company. Roles on which employees are currently placed will also be reviewed, to ensure lean and process based human resources.

(v) Sustainable Supply Chain

In October 2014 JSPL signed off on a group policy for ensuring sustainability embedded in the lifestyle of its products. By way of this policy JSPL committed to embed sustainable practices into the entire life cycle of JSPL’s products, starting from business operations such as raw material procurement techniques, to product manufacturing, transportation of finished goods, and disposal by consumer.

Establishing a sustainable source of raw material has been a top priority for the company’s business sustainability. Detailed information on how this was achieved in FY 2014-15 is in the ‘Ensuring raw material security’ section of this Business Sustainability Report.

Further, JSPL’s supply chain network is managed by the company’s procurement team. The procurement team is organized at the corporate and at the site level, depending on the total order
value of the business done with any specific vendor. All orders of an amount larger than ₹1,00,00,000 (For Maintenance, Repair and Operations) and ₹5,00,000 (For Projects) is managed by the company’s procurement team at the corporate office. All other vendor relationships are dealt with at site level. In October 2014, a list of JSPL’s site level suppliers and vendors was consolidated, along with each of their contact details. This team structure has ensured cost efficiency as well as proximity to local vendors. This has also enabled JSPL to influence vendors with sustainable business practices in the following ways:

1. **Value Chain Partners**: JSPL works towards sensitizing all of its value chain partners (suppliers, service providers, transporters, customers) for fulfilling their roles and responsibility towards sustainability principles.

2. **Sustainable Supply Chain**: JSPL ensures that sustainable business practices are embedded in the entire supply chain of its business activities.

3. **Local Factors**: JSPL engages local communities at its sites of operations to do business with the company. This helps the company in bringing a balance between economic, social and environmental impact of its operations on local communities.

Also, sustainability is very much a part of JSPL’s end-products and its usage. JSPL manufactures products of quality that comply with regulatory and statutory requirements. Most of the company’s operations are ISO 9001, 18001, 50001 certified. Sustainability is embedded in the development of new products by endeavouring to provide sustainable solutions to the requirements of various sectors, and ensuring that new products are designed and manufactured with energy efficiency and environmental protection in mind. In FY 2014-15, there has been a greater emphasis on selling steel to companies who manufacture products such as wind mills that ultimately contribute towards a more sustainable world.

(vii) **Customer Centricity**

As a priority, JSPL’s business model has a sharp focus on serving its customers with the finest quality products at economic prices on time and in full. The company’s Business-to-Business as well as retail products place customers at the centre of their operations. In FY 2014-15, the following initiatives to ensure customer centricity was undertaken:

1. 5 new stockyards were launched to ensure products are placed closer to the customer.
2. An initiative for Key Accounts Management was started in 2014. This initiative focussed on providing additional services to its most valued customers, who are chosen on the basis of frequency and volume of orders, i) segment of operation ii) customer’s past relationship with JSPL. All orders from these Key Accounts are serviced 100% within a specified number of days of clearance. Key Account Managers provide customised service to Key Account clients, and to do so they are trained to do a competitor analysis for each of their accounts and make action plans with timelines.
3. Direct feedback retrieval systems were established with enhanced grievance mechanisms.
4. Branding of all JSPL dealer shops under JSPL’s unique ‘Retail Identity Programme’, providing staff with training, post-training certificates, and uniforms.
5. Retail dealers were further encouraged to provide home delivery facilities to clients.
6. Enhanced marketing initiatives included offering JSPL branded products as give-aways. One such product – a car sun shade, became a popular product amongst customers in summer 2014-15. Customers used these branded car sun shades in their cars, thus also becoming brand ambassadors for JSPL.

- **Business Practices in the following ways:**

JSPL Practices Sustainable Business Processes

Building robust business processes is a priority at JSPL, driven especially by its MD and Group CEO, Mr Ravi Uppal. In recent years the company has rolled out systems for quality management (ISO9000), environment management (ISO14000) and occupational health and safety management (OHSAS18000) at Raigarh, DCFP, Tamnar, Raipur, Angul, Barbil, Tenzi, Patratu. JSPL’s unit at Angul has been certified for social accountability (SA 8000) and all operation sites in India are being certified for energy efficiency (JOS 50001). Alongside, the Business Sustainability department has worked with appropriate departments in the company to ensure that the highest standards of ethics, governance and risk mitigation processes are practiced. Alongside, JSPL’s Human Resources department leads in ensuring that the company’s values are enshrined in its business and that all its actions are ethical.

This section is a disclosure of the important measures taken especially during FY 2014-15 towards strengthening business processes at JSPL.

i) **Ethics and Values**

JSPL has a well-defined policy called ‘Group Code of Conduct’ (GCoC), embodied in a handbook given to every new employee. The GCoC is reviewed regularly. As on every year, in FY 2014-15 workshops were held at all sites to train employees to abide by the GCoC. E-learning modules too are available on the employee intranet to help employees stay up with the codes.

During the year, employees completed certification and declarations pertaining to compliance with the GCoC. It is mandatory for all employees to certify at least once in two years. Every employee is required to give three declarations pertaining to conflicts of interest in ownership of property, employment of a relative at JSPL and business relations with JSPL.

In FY 2014-15 JSPL signed off on five new company policies – Risk Management Policy, Policy on Human Rights Protection, Policy for Policy Advocacy, Policy on Stakeholder Mapping and Engagement Policy for Life cycle Sustainability. JSPL has, therefore, established all policies required by the National Voluntary Guidelines stipulated by the Ministry of Corporate Affairs.

Further there is a procedure outlined for employees to make proactive declarations of any conflict of interest with the company. The ‘Speak-Up’ Forum organized several times in the year for employees helps raise an alert on any ethical concern noticed anywhere within the company.

JSPL has had a Group Chief Ethics Officer since April 2013 and he is actively engaged in ensuring that all policies are implemented. He frequently sends out emails on ethical practices to all employees. Employees are encouraged to connect with him and share any dilemmas or concerns or even violations of ethical conduct in full confidence. JSPL’s Group Whistle Blower Policy is implemented across all group companies including the subsidiaries. It encourages employees to report any violations to the Group Ethics Officer without any fear and provides them with protection. The compliance of policies and procedures are additionally monitored by the Group Internal Audit and reviewed every quarter by the Board Committee on Governance & Business Ethics.

It is important to note that these institutional mechanisms for proactive implementation and responsive enforcement of ethical practices have been working vigorously.

ii) **JSPL Partners with All Stakeholders**

Historically, JSPL has maintained a relationship with all its stakeholders marked by candour and transparency, revolving around regular consultations and discussions. This is because we realize that our success is intricately tied up with the quality of our relationship with our stakeholders.

On the continuum of our evolving relationship with stakeholders, JSPL now views them as strategic allies for both mitigating business risks and expanding its markets. To this end in 2014-15 the company established a structured framework for new authentic ways of engaging with relevant groups of stakeholders and key members within those groups.

This section of JSPL’s Business Sustainability report is a narrative of what we did in the year to further enrich our stakeholder engagement.

**Investors**

JSPL’s Investor Relations department diurnally interacts with investors, analysts and market intermediaries. The objective of the organization is to:
<table>
<thead>
<tr>
<th>Principle</th>
<th>Applicable JSPL’s Policies</th>
<th>Link for the Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>d. Code of Internal Procedures and Conduct for Prevention of Insider Trading in Shares of the Company</td>
<td>Available on JSPL Intranet</td>
</tr>
<tr>
<td>Principle 2: Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle</td>
<td>a. Environment Policy</td>
<td><a href="http://www.jindalsteelpower.com/policies.html">http://www.jindalsteelpower.com/policies.html</a></td>
</tr>
<tr>
<td></td>
<td>d. Sustainability embedded in Life Cycle of Products.</td>
<td>Available on JSPL Intranet</td>
</tr>
<tr>
<td>Principle 3: Businesses should promote the well-being of all employees</td>
<td>a. Employee Well Being Policy</td>
<td>Available on JSPL Intranet</td>
</tr>
<tr>
<td>Principle 4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized</td>
<td>a. CSR Policy</td>
<td><a href="http://www.jindalsteelpower.com/policies.html">http://www.jindalsteelpower.com/policies.html</a></td>
</tr>
<tr>
<td></td>
<td>b. Prohibition of Sexual Harassment of Women Employees at Work Place</td>
<td>Available on JSPL Intranet</td>
</tr>
<tr>
<td></td>
<td>b. Energy Policy</td>
<td>Available on JSPL Intranet</td>
</tr>
<tr>
<td>Principle 7: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner</td>
<td>a. Policy Advocacy</td>
<td>Available on JSPL Intranet</td>
</tr>
<tr>
<td>Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner</td>
<td>a. Quality Policy</td>
<td><a href="http://www.jindalsteelpower.com/policies.html">http://www.jindalsteelpower.com/policies.html</a></td>
</tr>
</tbody>
</table>

**Questions**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does the policy conform to any national / international standards? If yes, specify.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>2</td>
<td>Has the policy been approved by the Board? If yes, has it been signed by MD / owner / CEO / appropriate Board Director?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>3</td>
<td>Does the Company have a specified committee of the Board / Director / Official to oversee the implementation of the policy?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>4</td>
<td>Has the policy been formally communicated to all relevant internal and external stakeholders?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>5</td>
<td>Does the Company have in-house structure to implement the policy/policies?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>6</td>
<td>Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders’ grievances related to the the policy/policies?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>7</td>
<td>Has the Company carried out independent audit/evaluation of the working of this policy by an internal or external agency?</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Notes:**

All policies are reviewed by the Board members and approved by the respective Board Committee. The policy is then signed by either the Whole time Director or the MD & Group CEO.
Key stakeholders like investors, analysts, and market intermediaries gain the right understanding of JSPL.

JSPL commands fair value in the market.

Raise funds when needed

JSPL made a public disclosure of its stakeholder engagement through:

- Industry
- Business Sustainability Report 2014
- JSPL website

Taking further the information disclosed, stakeholders are engaged continuously or at regular intervals based on specific needs through:

- One-on-one meetings
- Collective meetings
- Grievance redressal mechanisms
- Town-halls
- Field visits to communities etc.

Media

Among the highlights of FY 2015-16 was the creation of a more structured approach to managing JSPL’s media relations. JSPL Corporate Communication team plays a proactive role in engaging with media and other stakeholders who need information related to the company. In FY 2015-16 the team re-organized itself internally around custodians at the corporate Office in Delhi. The custodians are corporate communications team members, each with specialized knowledge of a domain and responsible for engaging with media and other related external stakeholders on that area. Headquartered in Delhi, JSPL’s corporate communication department is represented at all the capital cities of Indian states where the company operates. JSPL’s head of Corporate Communication Mr Gaurav Wahi is the official spokesperson ensuring that JSPL’s communication on media is standardised and consistent.

Employees

The work culture at JSPL ensures that all its employees function as members of a well-knit family united by a collective belief in the importance of their daily preoccupation with steel, power and infrastructure, for themselves, their company and the Nation. Nationalism and resilience are the watchwords of JSPL’s work culture. Both through good and challenging times, employees continue to do their best at JSPL. In FY 2014-15 there have been special efforts to highlight and strengthen this intrinsic work culture.

Led by JSPL’s human resources department, the company’s employee engagement practices are customised in line with local cultures of the different regions where the company operates. The company speaks to its people in their language. The HR team provides training, motivation and regular company updates. On billboards and the employee Intranet best performers are hailed. Sports activities and tournaments are organized regularly. Every JSPL township has excellent sports facilities. The JSPL employee guesthouse in Raigarh is appropriately enough called the ‘Jindal Life Enhancement Centre’. It is a popular venue for employee recreation with a large swimming pool, gymnasium, spa and massage facility, billiards room and two restaurants. Birthdays and wedding anniversaries of every employee is celebrated at JSPL with email announcements and very often with cakes and savouries. Celebrations also include events like Safety Week.

In FY 2014-15 the emphasis has been on recruiting and retaining more women. JSPL celebrates the Women’s Day, conducts workshops to sensitize men and women employees about sexual harassment policy and ensures that women employees have equal resources and access to leadership as male employees.

More details on JSPL’s human resources are in the section titled ‘Key Account Management’, an initiative focussed on providing additional services to its most valued customers, who are chosen on the basis of i) frequency and volume of orders, ii) segment of operation iii) customer’s past relationship with JSPL. Regular meetings are held with these customers and an agreement on the framework of the working relationship is reviewed and signed off on a yearly basis. JSPL encourages its dealers to deliver its Panther-TMT products at the doorstep of clients who buy one tonne or more of the bars.

Community

JSPL has always been passionate about taking care of local communities around its sites and, therefore, after assessing the needs of such communities scientifically it designs a slew of activities custom designed for their upliftment. In this regard, JSPL’s Chairman Mr. Naveen Jindal leads by example as he won for all Indians the right to hoist the Indian National Flag. He established the Flag Foundation of India. Mr Naveen Jindal also founded the Citizens’ Alliance for Reproductive Health and Rights, an organization that brings together Indian civil society for stabilizing India’s population. Awards won by JSPL for community service in FY 2014-15 are included in the section Awards and Recognition in this Business Sustainability Report.

Details on JSPL’s large number of CSR activities is provided in the section Building a Sustainable World - in the sub-section Around Our Operations, of this Business Sustainability Report. Details on large scale initiatives to improve the state of the world (that are done by JSPL apart from its CSR work) is included in the section Building a more Sustainable World - in the sub-section Beyond Our Operations. The section on Case Studies also provides a few concrete examples of action taken by JSPL to care for people.

JSPL’s CSR activities are wide ranging and implemented with passion by its team of driven social savants under the inspiring leadership of JSPL’s Head of CSR. Further, in FY 2014-15 the CSR programme was re-aligned to focus on 3 specific themes: 1. Education; 2. Health, Sanitation & Population Stabilization; 3. Community Infrastructure. JSPL’s M.D. & Group CEO closely overlooks the re-alignment process. The intention is for JSPL to have the deepest impact possible on a few specific challenges that the local communities face. At the ground level, different locations have CSR officers who conduct the field work and interact with the communities on a regular basis. These officers act as a bridge between the Company and communities and inform the Corporate CSR team about the needs of the locals. Apart from this, “Third party Need and Impact Assessment” is also carried out so as to check that the results of the CSR programs are in line with the community needs.

JSPL’s products and processes are designed for the least possible impact on local communities and their quality of life. For more details read Building a Sustainable World in this Business Sustainability Report.

Environment

JSPL considers the environment as an important stakeholder of its operations, engaging with them by investing in new technologies for environment protection and ensuring compliance to environment-related norms. To do so, the company has dedicated teams of environment experts at all site locations and at its corporate office in Delhi.

As a large multinational company JSPL believes that it can play a role in funding and implementing new technologies that provide a solid help in mitigating climate change. Most of these initiatives and decisions are taken at the plant level. The Chairman Mr. Naveen Jindal is himself actively involved in such initiatives, which involve substantial investments. The coal gasification plant is a good
example of the company’s investment in experimenting with new
technologies for steel production that are more environment
friendly. Details of this are in the section Case Studies of this
Business Sustainability Report.

JSPL’s Environment Management Division interacts with
stakeholders such as regulators, consultants, investors, NGOs
and communities to ensure that all statutory environment norms
are complied with. Further, Environment Laboratory at Barbil
centre has been empanelled as an environmental consultant
by the State Pollution Control Board (SPCB) of Odisha for a
period of three years. It will assist the SPCB with environmental
policies and norms for pollution control. More details about our
environment practices are in the section Sustainable Production.

Meaningful Engagement with Industry Associations
In August 2014 a major initiative of JSPL’s Business Sustainability
department was to review all memberships to industry
associations as well as to plan an engagement roadmap with
each. The review exercise involved a consultative process with
concerned employees and department heads. JSPL’s MD and
Group CEO Mr Ravi Uppal was closely engaged with this process
and engagement roadmap.

Further to this exercise, JSPL took a decision to focus its
engagement with a set of 24 industry associations that were of
the greatest relevance to the company. Associations to which
the company could make the most meaningful contributions.

It was also decided that JSPL must leverage its membership
with the 24 industry associations to support like-minded
communities, address concerns, access resources, industry and
industry information and education opportunities.

It is worth noting that JSPL’s Chairman Mr Naveen Jindal is a
member of the World Economic Forum’s Young Global Leader
alumni community. His MD and Group CEO Mr Ravi Uppal is on the
Board of the World Steel Association. JSPL’s Chief Sustainability
Officer is on the Steering Group for Sustainability United
Nations Global Compact India and member of the World Steel
Sustainability Expert Group. The company is also the Founding
Member of BRICS Chamber and Coal Producers Association and
a lifetime member of the Global Compact Network India.

In 2014-15 JSPL was represented by its Chairman Mr Naveen
Jindal at major forums of industry associations. For example,
he spoke at the Second Edition of India Steel 2015, an event
organized by the Ministry of Steel along with FICCI; the 6th India
Coal Summit organized by the Indian Chamber of Commerce;
the Metals, Mining, Minerals and Material conference organized
by the Delphi chapter of the Indian Institute of Metals; the Steel
Summit organized by CII. The MD & Group CEO Mr Ravi Uppal
also spoke at prominent forums during the year, including at
the Dialogue on Power Sector, a high-level interaction organized
by CII.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Association for Iron and Steel Technology (AIST) – India Member Chapter</td>
</tr>
<tr>
<td>2.</td>
<td>Alloy Steel Producers Association of India</td>
</tr>
<tr>
<td>3.</td>
<td>The Associated Chambers of Commerce &amp; Industry of India</td>
</tr>
<tr>
<td>4.</td>
<td>Association of Power Producers</td>
</tr>
<tr>
<td>5.</td>
<td>BRICS Chamber</td>
</tr>
<tr>
<td>6.</td>
<td>Confederation of Indian Industries</td>
</tr>
<tr>
<td>7.</td>
<td>Coal Producers Association</td>
</tr>
<tr>
<td>8.</td>
<td>Credit Rating Information Services of India Limited</td>
</tr>
<tr>
<td>9.</td>
<td>Engineering and Export Promotion Council of India (EEPC India) (Engineering Export)</td>
</tr>
<tr>
<td>10.</td>
<td>Federation of Indian Chambers of Commerce and Industry</td>
</tr>
<tr>
<td>11.</td>
<td>Federation of Indian Minerals Industries</td>
</tr>
<tr>
<td>12.</td>
<td>Indian Iron and Steel Sector Skill Council</td>
</tr>
<tr>
<td>13.</td>
<td>Independent Power Producers Association</td>
</tr>
<tr>
<td>14.</td>
<td>Infrastructure &amp; Logistics Federation of India</td>
</tr>
<tr>
<td>15.</td>
<td>Pellet Manufacturer’s Association</td>
</tr>
<tr>
<td>16.</td>
<td>PHD Chambers of Commerce</td>
</tr>
<tr>
<td>17.</td>
<td>Sponge Iron Manufacturers Association (SIMA)</td>
</tr>
<tr>
<td>18.</td>
<td>Steel Furnace Association of India</td>
</tr>
<tr>
<td>19.</td>
<td>Steel Research and Technology Mission of India</td>
</tr>
<tr>
<td>20.</td>
<td>Global Compact Network India</td>
</tr>
<tr>
<td>21.</td>
<td>United Nations Global Compact</td>
</tr>
<tr>
<td>22.</td>
<td>USIBC</td>
</tr>
<tr>
<td>23.</td>
<td>World Economic Forum</td>
</tr>
<tr>
<td>24.</td>
<td>World Steel Association</td>
</tr>
</tbody>
</table>
## Engaging Stakeholders at JSPL

<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>The mandatory Business Responsibility Reporting in Annual Declarations of top 100 companies in India, BSE GreenEx, and CarbonEx are instances of growing investor interest in sustainability aspects of business. JSPL has also frequently received queries from its investors and potential investors regarding sustainability performance.</td>
<td>Investor Relations’ Team</td>
<td>• One-on-One • Investor Conferences • Roadshows • Interactions with analysts • Dedicated E-Mail ID • Dedicated Investor Page on Company website</td>
<td>Daily basis along with quarterly updates to all investors,</td>
</tr>
<tr>
<td>Customers</td>
<td>JSPL places customer centricity as a crucial element of its business strategy.</td>
<td>Sales and Marketing Team</td>
<td>• Annual Customer Satisfaction Surveys • One-on-One Meetings with customers. • Exhibitions • Dealer meets • Key Account Management</td>
<td>Daily basis along with annual feedback,</td>
</tr>
<tr>
<td>Suppliers</td>
<td>JSPL believes that supply chain is critical to driving efficiency in our business context.</td>
<td>Procurement Team</td>
<td>Annual Vendor Meet One to One Meetings Supplier Audits</td>
<td>Daily basis and need based, as well as Annual communication for feedback,</td>
</tr>
<tr>
<td>Industry Associations</td>
<td>JSPL leverages industry associations 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>For JSPL, employees are the most important partners for the holistic success of the company.</td>
<td>Human Resources Team</td>
<td>• Emails • Interactions • Employee Satisfaction Survey</td>
<td>Continual,</td>
</tr>
<tr>
<td>Local Community</td>
<td>JSPL closely partners with the communities living in the regions JSPL operates in, in order to operate in a more conscious and responsible manner.</td>
<td>Corporate Social Responsibility Team</td>
<td>• Need assessment surveys • Field Visits, Pamphlets, Interactions / Workshops / Seminars etc. • Impact assessment studies</td>
<td>Continual,</td>
</tr>
<tr>
<td>Media</td>
<td>Media acts as one of the strongest opinion maker.</td>
<td>Corporate Communication Team</td>
<td>• Press Releases Media Page on Company website • Interviews and Press conferences</td>
<td>Continual,</td>
</tr>
<tr>
<td>Government and regulatory agencies</td>
<td>Law-making, implementation and monitoring institutions are important to JSPL. Engagement with these institutions through an ethical manner helps JSPL remain in line with the changing regulatory environment.</td>
<td>Corporate Affairs Team Company Secretary Group Environment Team</td>
<td>• Corporate Affairs Team • Company Secretary • Group Environment Team • Letters to concerned institutions • Meeting through Forums</td>
<td>Need Based,</td>
</tr>
</tbody>
</table>

### iii) Good Governance:

Corporate governance at JSPL is oriented to greater accountability, inclusivity, equity, responsibility and transparency in the company within the following framework:

- **Engaging a diverse and highly experienced Board of Directors with expertise in industry, finance, management and law**
- **Deploying well-defined governance structures that establish checks and balances and delegate decision-making to appropriate levels**
- **Adopting transparent and robust systems, processes, policies and procedures**
- **Making high levels of disclosures for dissemination of corporate, financial and operational information to all stakeholders**
- **Having strong systems and processes to ensure full and timely compliance with legal and regulatory requirements**

This framework is implemented through a combination of strategic governance structure and an operational governance structure, which have been described below:

1. **Strategic Governance Structure**: This is composed 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.

2. **Operational Governance Structure**: This is composed of a high-level Management Committees (MANCO) for each business segment and Unit Committees (UNICO) at each location. Continuous meetings and deliberations at these levels ensure timely and appropriate decision-making and helps drive collective change in an efficient and effective manner.

3. **Board of Directors**: This apex governing body frames and drives corporate governance policies. Its role includes creating value for the company’s stakeholders while remaining committed to its vision, mission and values. In line with its commitment to the highest standards of governance practices the Board has adopted the Group Code of Conduct and other regulatory requirements. To safeguard the interest of all stakeholders, reconcile conflicts of interest and assess management performance, it has appointed independent directors. All Board members have expertise in industry, operations, finance, legal and management. The Board provides strategic guidance and independent views to the company’s management while discharging its fiduciary responsibilities.
4. The Board meets periodically to discuss and decide company/business policies and strategy apart from other regular business matters. Board Meetings are usually held at the Corporate Office of the company in New Delhi. During 2014-15, five Board Meetings were held in 2014 on April 29, July 15, August 6, October 9 and November 4 and two in 2015 on February 3, and March 18.

5. Board Committees play a vital role in strengthening corporate governance practices and focus on issues. They ensure expeditious resolution of matters. Committees at the Board level make 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.

6. The HSE–CSR Committee oversees the implementation of quality, occupational health, environment and CSR policies. It provides direction and monitors progress in those areas other than reviewing operational performance, safety and environmental risks and compliance to health, safety, and environmental laws. The committee makes recommendations on CSR budgeting and spending and recommends activities in a given business context. It is chaired by an independent director and has one independent director and two executive directors. Senior officers from different departments are invited to its meetings to brief members and present reports on items on the agenda of these meetings. During the reporting period, the committee met four times.

iv) Risk and Compliance Management

Our web-based compliance management tool, ‘iComply’, went live in 2014 with three key objectives:

- Create a comprehensive inventory of compliance obligations
- Facilitate understanding of legal and regulatory requirements among process owners
- Set-up an automated compliance reporting and monitoring process

The key to the success of iComply is an employee’s individual effort to use the tool appropriately for ensuring 100% compliance with all statutory norms.

As part of this system, about 400 statutes and acts, translating into roughly 15,000 individual compliances for the group have been catalogued. Each has been assigned to an ‘owner’ amongst JSPL’s employees whose responsibility it is to ensure adherence under the supervision of an ‘approver’. Automated monitoring and tracking of compliances ensures that nothing escapes notice and delays, if any, are met with appropriate escalation and timely closure. In addition, the reporting mechanism helps in tracking the percentage of compliance achieved. JSPL’s iComply reduces chances of human error and ignorance.

Key Features of iComply:-

- Central repository of all applicable compliances, statutory forms, licenses and evidences for compliances
- Flexibility to customize the tool based on needs and practices
- Enables creation of multiple approval and escalation levels
- Enables customizable dashboards and compliance status and exception reports
- Facilitates customizable alerts and reminders
- Audit Trails to track compliance at every step
- Enables easy updating of central repository as and when legislative amendments are introduced

Example of Compliance Summary Report

In FY 2014-15, it was initiated by JSPL’s Business Sustainability team to institutionally set up risk management in the company. During the year, a formal structure for risk identification, assessment, prioritisation and mitigation was also developed by senior members of the company’s management. The Board’s Investment and Risk Management Committee was split into two Committees one of them being the Risk Management Committee.
Also a risk management policy was designed to promote stable business growth and a pro-active approach in reporting, evaluating and resolving risks associated with the business. The policy forms a structured and disciplined approach to risk management to guide decisions on risk related issues. It has three key objectives:

1. To encourage/improve informed business decisions keeping risks in mind and without exposing the Group to avoidable hazards
2. To enable coordinated identification, prioritisation and management of risks without adding undue administrative burden
3. To enable compliance with appropriate regulations, wherever applicable, through the adoption of best practices.

In addition, appointment of Internal Risk Management Committee was also initialised (later implemented). This body has identified an indicative list of 25 risks that are reviewed constantly. This list would change depending on timelines for mitigation, but at all times they would reside in one of the following five buckets:

i) Strategic and portfolio risks
ii) Customer and operational risks
iii) Finance and investment risks
iv) Brand and reputation risks
v) Regulatory and compliance related risks

Internal Risk Management Committee
The Internal Risk Management Committee is responsible to develop and oversee the implementation of the overall risk management framework as per ISO 31000. This includes undertaking of comprehensive risk identification exercise, conduct review sessions to ensure mitigation actions are progressing as planned and provide periodic updates to the executive body of JSPL’s parent company, JSPL’s Group Executive committee.

Further in FY 2014-15 JSPL’s Business Sustainability team started the process of recruiting and placing ‘Risk and Compliance Officers’ at each of its operating sites (later implemented in FY 2015-16). These officers are responsible for identifying, reporting and, most importantly, mitigating risks at their sites. They are expected also to ensure 100% compliance with applicable rules, laws, legislations and guidelines and manage the “iComply” platform for their respective location(s). The officers report to their respective plant head and to the Internal Risk Management Committee.

Sustainable Production Processes at JSPL
Establishing sustainable production processes at JSPL means manufacturing high quality products, at most optimum cost, with the least negative impact on environment and society, during the manufacturing as well as life-cycle of JSPL’s products.

JSPL strives to achieve this by investing in new technologies that optimize operational efficiencies and costs. A good example of such investments is its coal gasification plant, a new technology that saves on energy and boosts manufacturing efficiency. Almost all waste produced from this plant is either re-used in the production process or sold. At JSPL sustainable production processes imply a strong emphasis on product longevity. For example, the rebars manufactured at Patratu in Jharkhand are more resistant to disasters like earthquakes and fire. With light gauge steel (LGS) it is possible to build earthquake resistant high rise edifices in less time.

Key Features of Light Gauge Steel (LGS)
Manufactured by JSPL
1. Prefabricated panels: High precision and faster construction (60% faster).
2. Light weight: Ease of handling, lower chance of progressive collapse, higher earthquake resistance
3. Dimensionally stable: durable construction, doesn’t expand or contract with moisture or temperature variations
4. Thermal & acoustic insulation: Expanded poly styrene or rockwool insulation, vapour barrier, energy efficient, reduced HVAC load by up to 10%
5. Fire resistance: Fire rating as per building code, internal wall of gypsum / cement board, external wall of cement board
6. Less sound transmission: Gypsum board with cement fibre board increases the STC of rockwool / EPS insulation
7. Seismic resistance: Pin jointed or simply supported connection allowing the joints to flex, ductile system for dissipating load
8. Eco-friendly: Minimum requirement of natural resources such as wood and water, low carbon foot print

The use of LGS technology would be crucial to a rapidly urbanizing India, a country which has 18% of the world’s population but only 2.4% of its total land space. LGS can help address this imbalance because the technology makes it possible to build safe, cost-effective, resource efficient, and environmentally friendly high-rise buildings quickly. LGS frames reduce labour intensity and construction time. They provide greater architectural flexibility, structural integrity and much higher resistance to earthquakes. At Punjipatna JSPL manufactures light-weight cold-formed steel sections for speedy low-rise building construction on automated roll forming lines.

JSPL’s power business too contributes to India’s growth story. According to World Bank data, 25% of India’s population, or about 300 million people, do not have access to electricity. JSPL is narrowing this gap through captive generation capacity of 1661 MW, independent power production capacity of 3400 MW(P/L) and 24 MW wind power generation capacity. In Odisha, only 43 per cent of households use electricity as the primary source of lighting. This financial year, JSPL embarked upon an important rural electrification project in Barbil, Odisha in partnership with the district and state administration, lighting up 250 households within two months.

Country Name Percentage of Population with Access to Electricity

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Percentage of Population with Access to Electricity*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Federation</td>
<td>100</td>
</tr>
<tr>
<td>China</td>
<td>99.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>98.93</td>
</tr>
<tr>
<td>Pakistan</td>
<td>91.37</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>85.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>82.7</td>
</tr>
<tr>
<td>Nepal</td>
<td>76.3</td>
</tr>
<tr>
<td>India</td>
<td>75</td>
</tr>
</tbody>
</table>

### i) Raw Material Sourcing Plan:

A detailed disclosure of JSPL’s business model for raw material procurement is provided in two sections of this report: Top Priorities for JSPL’s Business Sustainability and JSPL has a Sustainable Business Model. Here is a summary of the disclosure:

While JSPL endeavours to secure its coal and iron interests through different options, it is alongside adopting innovative ways to reduce its demand by, for example, switching to the blast furnace route for producing DRI. This uses coking coal from Australia and our own sources in Mozambique. Likewise, where quality grade iron ore is not available, we are exploring ways and means of using lower grade iron ore with Fe content of less than 60%, which is available in abundance.

### ii) Achieving Operational Excellence:

JSPL is on the path of developing leaner and cost-optimized operations. This is significant as the company’s business operations are spread across four continents, Asia, Middle-East, Africa and Australia. The company leverages technology wherever possible in its processes to reduce costs and increase efficiency.

For example, tele-presence facilities, which were launched last financial year, have been scaled up to include Delhi, Gurgaon, Raigarh, Angul, Tamnar, Patratu and Barbil. This has helped JSPL drastically cut business travel costs, enhance employee productivity and curtail carbon footprint. Small steps like reducing colour prints have helped the company cut both carbon footprints and costs.

Specialized energy management teams have been stationed at Raigarh, Angul, and Tamnar. These teams work towards improving...
JSPL has signed agreements to develop three hydroelectric power projects with a combined capacity of 6100 MW in Arunachal Pradesh. JSPL has a wind power production capacity of 24 MW at Satara, Maharashtra.

### Environment Management

The company has developed Environment Management teams at every location. The division comprises trained technical staff, which manages the environment-related aspects of JSPL's units and projects. Details on JSPL’s Environment Management practices are included in the section JSPL Practices Sustainable Business Processes. JSPL’s Environment management teams assess new projects to determine their impact on environment, constantly monitor emissions/discharges and their control during production processes, increase awareness among workforces, up-grade and retrofit pollution control systems, initiate steps for resource conservation, monitor environmental parameters and the on-line environment data base management system.

JSPL has modern environmental laboratories 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 at the ISO 14000 benchmarks. These ensure regular monitoring of energy consumption and conservation, waste generation and disposal, air and GHG emissions, as well as noise.

JSPL has installed Air Pollution Control Equipment (APCE) such as electrostatic precipitators (ESP), scrubber systems, cyclones, bag houses, and waste heat recovery systems to reduce emission from its operations. The company has also installed a centralised de-dusting system with an electrostatic precipitator for dust control. During the year, a new bag filter was installed at lime ground hopper and circuit at SMS 3 at Raigarh.

The company has installed state-of-the-art devices for curbing atmospheric pollution. Real time check on the performance of these devices is done through automated online analysers such as opacity meters and ambient air quality monitoring stations (AAGMS). To further track and reduce emissions, JSPL has installed continuous emission monitoring systems at Raigarh, Angul, Barbil, Tamnar, Patratu and Oman. These systems are connected to pollution control boards for continuous tracking. Shaded Steel at Oman has installed the Ambient Air Quality Monitoring Station (AAQMS) and it is connected with the monitoring centre of Ministry of Environment and Climate Affairs.

In FY 2014-15 at the Raigarh operations site, JSPL has started a life cycle assessment study for steel plate production. Earlier, GHG accounting was also carried out for all operations at Raigarh. GHG inventory is maintained at Oman unit and data are submitted to Ministry of environment and Climate Affairs, Sultanate of Oman.

At the company level (JSPL and JPL) during FY 2014-15, JSPL’s GHG Scope 1 emissions for the year are estimated at 29068.83 thousand tonnes of CO2 and Scope 2 emissions at 186.24 thousand tonnes of CO2. JSPL’s GHG Scope 1 emissions for the year during FY 2014-15 at the Raigarh operations site, JSPL has started a life cycle assessment study for steel plate production. Earlier, GHG accounting was also carried out for all operations at Raigarh. GHG inventory is maintained at Oman unit and data are submitted to Ministry of environment and Climate Affairs, Sultanate of Oman.

### Indian operations

<table>
<thead>
<tr>
<th></th>
<th>FY 2014-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coking coal</td>
<td>11,81,926</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>33,834</td>
</tr>
<tr>
<td>Total non-coking coal</td>
<td>176,30505</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>246,843</td>
</tr>
<tr>
<td>Total Coke</td>
<td>1,68,305</td>
</tr>
<tr>
<td>Energy (TJ)</td>
<td>4,416</td>
</tr>
<tr>
<td>Total FO / HSD / LDO</td>
<td>163,678</td>
</tr>
<tr>
<td>Quantity (KL)</td>
<td>6871</td>
</tr>
<tr>
<td>Others</td>
<td>4292</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
</tr>
</tbody>
</table>
iv) Waste Management

The major waste items generated from JSPL’s operations are tailings produced during the extraction and beneficiation processes, slag and sludge during mineral processing, ash from power plants and hazardous wastes such as used oil, tar and char.

To collate all fines and usable wastes, JSPL has set up a sinter plant at Raigarh. The company utilizes the fly ash and slag generated from power plants, DRI, and blast furnace. These plants manufacture fly ash bricks, which use fly ash and slag generated from power plants, and hazardous wastes such as used oil, tar and char.

JSPL has put in place brick-making plants at Angul, Patratu and Raigarh, which use fly ash and slag generated from power plants, DRI, and blast furnace. These plants manufacture fly ash bricks, rectangular pavers, uni-pavers, kerb stones and retaining walls.

The installation of solid waste (non-process waste) processing unit at Angul was another important waste management step. Here domestic solid waste from the residential colony and plant premises are segregated to plastic, glass, tin, rubber, cotton and cardboard. Food and kitchen wastes are processed to generate compost for horticulture. Non-biodegradable waste is collected, separated and sold off to waste recyclers.

At Tamnar, a 2-TPD biogas plant was commissioned, which uses kitchen waste as feed. During FY 2014-15, hazardous waste was produced in form of used oil, used oil filters, oil contaminated cotton, cotton used for the production of used oil, used oil filters, oil contaminated cotton, oil sludge and PGP TAR and sludge were produced. All these wastes were either reused internally or sent to authorized-recyclers. The quantity of this waste disposed during the year, includes 146.068KL of used oil, 35 Kgs and 599 numbers of used oil filters, 200 Kgs of used hose pipes, 96,000 Kgs of ETP sludge and 604.23 Kgs of oil contaminated cotton. A small amount of waste is also stored at sites within the permissible limits. Besides, there was 31265 kgs of batteries, 5943.27 Kgs of bio-medical waste were disposed of, and 12,760 Kgs of e-waste from Indian operations was produced during the year. These wastes were disposed-off as per respective applicable regulations.

Through 2014-15, JSPL commissioned the Slag-Atomisation Plant (SAP) at the Steel Melting Shop (SMS) II and the advanced Electric-Arc-Furnace (EAF) slag processing technology in collaboration with the Korean technological supplier, M/s Ecomaister Co Ltd in Raigarh. The company also installed a slag crusher plant to use the slag generated from the SMS.

In Tensa, JSPL made an inventory of the e-waste being generated. Most of the e-waste was disposed of through an agency authorized by the State Pollution Control Board and the rest was stored according to the guidelines prescribed by the central Pollution Control Board.

### Hazardous Waste Disposal

<table>
<thead>
<tr>
<th>location</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angul</td>
<td>1.17 MTPA</td>
</tr>
<tr>
<td>Patratu</td>
<td>30,000 Bricks/day</td>
</tr>
<tr>
<td>Raigarh</td>
<td>300,000 Bricks/day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non Hazardous Waste</th>
<th>Unit</th>
<th>Generation (Total)</th>
<th>Utilization / Disposal (Total)</th>
<th>%age Utilization / Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slag</td>
<td>Tonnes</td>
<td>150076.235</td>
<td>150076.23</td>
<td>100.00</td>
</tr>
<tr>
<td>Mill scale</td>
<td>Tonnes</td>
<td>18820.533</td>
<td>17389.533</td>
<td>92.40</td>
</tr>
<tr>
<td>Internal scrap</td>
<td>Tonnes</td>
<td>23110</td>
<td>17133</td>
<td>74.14</td>
</tr>
<tr>
<td>Ash</td>
<td>Tonnes</td>
<td>3217064</td>
<td>3064389</td>
<td>95.25</td>
</tr>
<tr>
<td>Knock out sand</td>
<td>Tonnes</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Electrode Flux</td>
<td>Tonnes</td>
<td>1800</td>
<td>1800</td>
<td>100.00</td>
</tr>
<tr>
<td>Overburden</td>
<td>Tonnes</td>
<td>3</td>
<td>3</td>
<td>100.00</td>
</tr>
<tr>
<td>Bottom Ash</td>
<td>Tonnes</td>
<td>19747365</td>
<td>19747365</td>
<td>100.00</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>Tonnes</td>
<td>2390209.19</td>
<td>1787817.6</td>
<td>74.80</td>
</tr>
<tr>
<td>DRI Char</td>
<td>Tonnes</td>
<td>391302</td>
<td>391302</td>
<td>100.00</td>
</tr>
<tr>
<td>DRI Bag filter dust</td>
<td>Tonnes</td>
<td>143009</td>
<td>10357</td>
<td>7.24</td>
</tr>
<tr>
<td>DRI Accretion</td>
<td>Tonnes</td>
<td>618271</td>
<td>4990</td>
<td>8.06</td>
</tr>
<tr>
<td>DRI ABC Dust</td>
<td>Tonnes</td>
<td>18325</td>
<td>590</td>
<td>3.22</td>
</tr>
<tr>
<td>BF Slag</td>
<td>Tonnes</td>
<td>687014</td>
<td>687014</td>
<td>100.00</td>
</tr>
<tr>
<td>BF Dust catcher dust</td>
<td>Tonnes</td>
<td>7139</td>
<td>6302</td>
<td>88.28</td>
</tr>
<tr>
<td>BF Slurry from ETP</td>
<td>Tonnes</td>
<td>3401</td>
<td>2549</td>
<td>74.95</td>
</tr>
<tr>
<td>BF Stock house dust</td>
<td>Tonnes</td>
<td>3741</td>
<td>1735</td>
<td>46.38</td>
</tr>
<tr>
<td>BF Cast house dust</td>
<td>Tonnes</td>
<td>1561</td>
<td>1382</td>
<td>88.53</td>
</tr>
<tr>
<td>SMS Slag</td>
<td>Tonnes</td>
<td>947743</td>
<td>730080</td>
<td>77.03</td>
</tr>
<tr>
<td>SMS EAF Bag-Filter dust</td>
<td>Tonnes</td>
<td>21326</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>SMS RMH Bag-Filter dust</td>
<td>Tonnes</td>
<td>7505</td>
<td>6832</td>
<td>91.03</td>
</tr>
<tr>
<td>SMS Bag Filter Dust</td>
<td>Tonnes</td>
<td>15312</td>
<td>7233</td>
<td>47.83</td>
</tr>
<tr>
<td>SMS Caster scale</td>
<td>Tonnes</td>
<td>7323</td>
<td>1550</td>
<td>21.17</td>
</tr>
<tr>
<td>PGP Ash</td>
<td>Tonnes</td>
<td>115294</td>
<td>115294</td>
<td>100.00</td>
</tr>
<tr>
<td>SAF Slag</td>
<td>Tonnes</td>
<td>37668</td>
<td>37668</td>
<td>100.00</td>
</tr>
<tr>
<td>SAF Bag-Filter dust</td>
<td>Tonnes</td>
<td>3331</td>
<td>287</td>
<td>8.62</td>
</tr>
<tr>
<td>RUBM/MLS/M/Plate Mill Scale</td>
<td>Tonnes</td>
<td>25879</td>
<td>25879</td>
<td>100.00</td>
</tr>
<tr>
<td>Sinter ESP Dust</td>
<td>Tonnes</td>
<td>18891</td>
<td>18891</td>
<td>100.00</td>
</tr>
<tr>
<td>Sinter Bag-filter dust</td>
<td>Tonnes</td>
<td>5022</td>
<td>5022</td>
<td>100.00</td>
</tr>
<tr>
<td>LDP Bag-filter dust</td>
<td>Tonnes</td>
<td>7965</td>
<td>7965</td>
<td>100.00</td>
</tr>
<tr>
<td>Tar</td>
<td>MT</td>
<td>115294</td>
<td>115294</td>
<td>100.00</td>
</tr>
</tbody>
</table>

This includes figures for Angul, DCPP, Patratu, Raipur, JPL Mines, JPL Tamnar | 4X250 & 4X600, Tensa, Raigarh Steel and Cement, JPL Mines.
A few years ago, JSPL defined the company’s core values as POSSIBL:

- P: People passion,
- O: Ownership,
- S: Sense of belonging,
- S: Sustainability,
- I: Integrity,
- B: Business excellence
- L: Loyalty.

HR policies are in place for the smooth functioning of people processes and procedures in areas like recruitment, leave, succession planning, career development, rewards and recognition, learning and development, medical and accidental benefits, employee separation, retirement benefits, travel, welfare and recreation.

Gender Parity

Approximately 3.2 percent of JSPL’s workforce at the Group level is currently women. This is an aspect that the company is working hard to improve with a series of efforts. These efforts are not just to increase the number of women employees at JSPL, but also to ensure men and women at JSPL both get equal access to leadership and resources, opportunities to leadership positions, that there is no wage disparity whatsoever, and that the aspirations of men and women at JSPL match their exact roles in the organization.

There is also an emphasis on preserving each men and women employees’ individual authenticity within the organization. JSPL’s Chief Sustainability Officer has made a personal commitment to ensure that these objectives are met and participated in campus recruitment drives in FY 2014-15 to ensure more women were recruited, and then mentored within the organization.

Two salient features have especially enabled these efforts:

i) The top management walks the talk:

The Chairman Mr Naveen Jindal and the MD & Group CEO Mr Ravi Uppal have both facilitated the placement of women at key senior positions in the company. And post
boarding, they have provided support to the initiatives of these highly placed women at the right moments. This visible support from the top management to women employees has had a positive impact for women down the entire organization.

ii) Approaching gender parity as part of the larger context of drawing diverse perspectives

JSPL’s approach has been to encourage an eclectic work environment where various diverse perspectives – young, old, local, global, male, female – are brought in, healthily debated and accepted. This is why it is important that the organization recruits individuals with diverse backgrounds and equally important that it helps these diverse people preserve their individual perspectives and present them on appropriate platforms even if those perspectives are different from the majority view. It is this thinking that shapes the organization’s approach to gender diversity too.

In FY 2014-15, 6% of new recruits in India at JSPL were females. JSPL is retaining its women employees by providing a flexible, comfortable and secure work environment. Some of our key strategic employees, the President Finance, the Chief Sustainability Officer, the Vice President Marketing, are all women. JSPL is also increasing the visibility of these women leaders who are role models for other women in the company. Also a committee on internal complaints related to sexual harassment has been formed. A workshop on prevention of sexual harassment at workplace was conducted in March 2015.

Youth and Mentorship

As in the FY 2014-15, 25.6% of JSPL’s employees in India and 36% of JSPL’s employees in Oman were below the age of 30. Almost 52.5% of JSPL’s new recruits in FY 2014-15 were also below 30. JSPL’s Chairman Mr Naveen Jindal himself is one of India’s youngest business leaders and is part of the community of Young Global Leaders of the World Economic Forum.

There is a conscious effort at JSPL to recruit young talent. A subsequent focus, therefore, has been to ensure mentorship and support to the young. The MD & Group CEO of JSPL Mr. Ravi Uppal leads this process by including a team of young managers in the CEO’s office, appointed on a rotational basis. These young managers support him by coordinating JSPL’s separate businesses and functions and are thereafter placed at key leadership positions in the company. Mentorship in this way has been an important value and practice at JSPL, led by the company’s CEO as a role model.

Also, the HR department has put in place a scientifically evolved process for succession planning which involves identifying and grooming a pool of talented youngsters for key positions in the business. In the last financial year, we launched the Young Leaders Programme (YLP) targeting first-time managers. YLP focuses on leading self and leading others to build effectiveness. The young and talented managers work with OKPs and are groomed for prominent leadership roles.

JSPL has a well-developed learning and development team that runs training programmes at a group and individual basis for its employees. The Jindal Lead Management Trainee programme, Graduate Engineer Trainee programme and Management Trainee programme are all directed towards developing young talent in the company. The focus of these training programmes is to manage the self, manage others, and manage JSPL’s business. Coaching, peer learning and mentorship by senior leaders are an integral part of these programmes. Details of these programmes are in an earlier section, The Top Priorities for JSPL’s Business Sustainability in this Business Sustainability Report. In FY 2014-15, 16 employees were included in the Jindal Lead Management Trainee programme, none in the Graduate Engineer Trainee programme and 52 in the Management Trainee programme.

Learning and Development

Every year, based on training needs identified by an annual Performance Development Review (PDR) process during the employees Coverage in Skill and Safety Upgradation training*

2012-13 2013-14 2014-15
75% 61% 72%

* Data for JSPL (Standalone)

Collective Bargaining

Jindal Steel & Power Factory Workers Union has been in place since 1994 at Raigarh for protecting the rights of workers. 100% of non-supervisory permanent employees at Raigarh are members of this union. There is also the Jindal Steel & Power Mazdoor Sangha, JSPL. Industrial Workers Union, Jindal Steel & Power Labour Union and Jindal Mazdoor Sabha at Angul, Odisha. All arrangements with respect to collective bargaining and trade unions are as per applicable laws of the land.

Permanent Employee break up by gender (as on March 31, 2015)

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>8,306</td>
<td>319</td>
<td>8,625</td>
</tr>
<tr>
<td>Oman</td>
<td>619</td>
<td>18</td>
<td>637</td>
</tr>
<tr>
<td>South Africa</td>
<td>200</td>
<td>37</td>
<td>237</td>
</tr>
<tr>
<td>Mozambique</td>
<td>446</td>
<td>17</td>
<td>463</td>
</tr>
<tr>
<td>Total</td>
<td>9571</td>
<td>319</td>
<td>9962</td>
</tr>
</tbody>
</table>

Permanent Employee break up by age (as on March 31, 2015)

<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>
</thead>
<tbody>
<tr>
<td>India</td>
<td>2,216</td>
<td>5,814</td>
<td>595</td>
<td>8,625</td>
</tr>
<tr>
<td>Oman</td>
<td>228</td>
<td>378</td>
<td>31</td>
<td>637</td>
</tr>
<tr>
<td>South Africa</td>
<td>58</td>
<td>155</td>
<td>24</td>
<td>237</td>
</tr>
<tr>
<td>Mozambique</td>
<td>188</td>
<td>242</td>
<td>23</td>
<td>463</td>
</tr>
<tr>
<td>Total</td>
<td>2,700</td>
<td>6,589</td>
<td>673</td>
<td>9962</td>
</tr>
</tbody>
</table>
and monitoring took off at each site to ensure periodic OHS performance reviews to identify potentially risky behaviour, activities and operations. In addition, during FY 2014-15 the following four new committees took off at each site to ensure periodic OHS performance reviews and monitoring.

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>&lt;30</th>
<th>30-50</th>
<th>&gt;50</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>659</td>
<td>42</td>
<td>341</td>
<td>316</td>
<td>44</td>
<td>701</td>
</tr>
<tr>
<td>Oman</td>
<td>185</td>
<td>0</td>
<td>74</td>
<td>106</td>
<td>5</td>
<td>185</td>
</tr>
<tr>
<td>South Africa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mozambique</td>
<td>173</td>
<td>7</td>
<td>149</td>
<td>25</td>
<td>6</td>
<td>180</td>
</tr>
<tr>
<td>Total</td>
<td>1019</td>
<td>49</td>
<td>561</td>
<td>450</td>
<td>57</td>
<td>1068</td>
</tr>
</tbody>
</table>

Attrition break-up by gender and age

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>&lt;30</th>
<th>30-50</th>
<th>&gt;50</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>907</td>
<td>71</td>
<td>388</td>
<td>447</td>
<td>143</td>
<td>978</td>
</tr>
<tr>
<td>Oman</td>
<td>NA</td>
<td>NA</td>
<td>15</td>
<td>17</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>South Africa</td>
<td>18</td>
<td>10</td>
<td>4</td>
<td>20</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td>Mozambique</td>
<td>73</td>
<td>11</td>
<td>60</td>
<td>23</td>
<td>1</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>998</td>
<td>92</td>
<td>471</td>
<td>504</td>
<td>149</td>
<td>1124</td>
</tr>
</tbody>
</table>

vii) Occupational Health & Safety

JSPL has a well-defined occupational health and safety policy, which incorporates quality control systems like OSHAS18001 to protect and promote the safety and health of workers. JSPL complies with the codes and guidelines stipulated by the Factories Act, 1948, Mines Act, 1952, The Motor Transport Workers Act, 1961, Coal Mines Labour Welfare Fund Act, 1974 and the Mines Labour Welfare Fund. All new projects and significant modifications to existing facilities are subject to a Pre Start-up Safety Review. In FY 2014-15 there have been no new initiatives at the policy level for safety.

In FY2014-15 JSPL became the only company in India to acquire a 60-metre turntable ladder—a fire-fighting machine to battle fires in high-rise structures. Imported from Australia and installed in Angul, the machine can throw water and foam jet to a height of 85 meters.

In terms of governance, safety related aspects are typically discussed by the HSE-CSR Committee of the Board of which the MD & Group CEO is a part. He is keenly involved in ensuring the safety of all workers in the company. JSPL has a head of Health & Safety who leads a team of health, safety and fire professionals to protect and promote the safety and health of workers. JSPL has a well-defined occupational health and safety policy, which incorporates quality control systems like OSHAS18001 to protect and promote the safety and health of workers. JSPL complies with the codes and guidelines stipulated by the Factories Act, 1948, Mines Act, 1952, The Motor Transport Workers Act, 1961, Coal Mines Labour Welfare Fund Act, 1974 and the Mines Labour Welfare Fund. All new projects and significant modifications to existing facilities are subject to a Pre Start-up Safety Review. In FY 2014-15 there have been no new initiatives at the policy level for safety.

In FY2014-15 JSPL became the only company in India to acquire a 60-metre turntable ladder—a fire-fighting machine to battle fires in high-rise structures. Imported from Australia and installed in Angul, the machine can throw water and foam jet to a height of 85 meters.

In terms of governance, safety related aspects are typically discussed by the HSE-CSR Committee of the Board of which the MD & Group CEO is a part. He is keenly involved in ensuring the safety of all workers in the company. JSPL has a head of Health & Safety who leads a team of health, safety and fire professionals located at all JSPL sites manned by doctors and nursing staff. In another initiative the number of first aid boxes on shop floors was increased to make them easily accessible at any time. Over the last few years, JSPL’s Health & Safety Department has ensured that labels, indicators, posters, tags, and signs related to safety are appropriately displayed in the plant area to keep employees alert at all times to any potential danger.

Notably in FY 2014-15, there were zero recordable accidents at the company’s Raigarh cement plant, Raigarh mines and washery, Dongamahua Captive Power Plant (DCPP), JPL Tamnar, Patratu, Raipur and Tensa.

Safety Performance of Indian Operations

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Lost Time Injuries</th>
<th>No. of Fatalities</th>
<th>Man days Lost</th>
<th>Frequency Rate</th>
<th>Severity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raigarh</td>
<td>5</td>
<td>3</td>
<td>19000.00</td>
<td>0.39</td>
<td>915.18</td>
</tr>
<tr>
<td>JPL Mines</td>
<td>2</td>
<td>-</td>
<td>164</td>
<td>0.085</td>
<td>69.82</td>
</tr>
<tr>
<td>Angul</td>
<td>4</td>
<td>3</td>
<td>18,541.00</td>
<td>1.74</td>
<td>4,619.36</td>
</tr>
<tr>
<td>Barbil</td>
<td>2</td>
<td>-</td>
<td>44</td>
<td>0.31</td>
<td>6.91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Frequency Rate</th>
<th>Severity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raigarh</td>
<td>0.39</td>
<td>915.18</td>
</tr>
<tr>
<td>JPL Mines</td>
<td>0.085</td>
<td>69.82</td>
</tr>
<tr>
<td>Angul</td>
<td>1.74</td>
<td>4,619.36</td>
</tr>
<tr>
<td>Barbil</td>
<td>0.31</td>
<td>6.91</td>
</tr>
</tbody>
</table>

British Safety Council, UK awarded the following sites with International Safety Award for implementing world class safety practices:
- Jindal Steel & Power Limited (Machinery Division), Raipur
- Jindal Steel & Power Limited, Patratu
- Jindal Steel & Power Limited, Barbil
- Jindal Power Limited (4X250 MW), Tamnar
- Jindal Power Limited (4X600 MW), Tamnar

Greentech Foundation of India awarded the following sites in recognition of the high level of their safety practices:
- Silver Safety Award to Jindal Steel & Power Limited, Patratu
- Gold Safety Award to Jindal Steel & Power Limited, Barbil
- Appreciation Certificate to Jindal Power Limited (4X250 MW), Tamnar

National Safety Council, India awarded safety award to Jindal Power Limited (4X250 MW), Tamnar.

Safety Parameters in FY2014-15

- Accident frequency rate reduced by 18.59%
- Accident severity rate reduced by 35.95%
- Fatality rate reduced by 34.32%
- Man-days lost on account of accidents reduced by 16.41%

In FY 2014-15 the Head of Health & Safety led an initiative aimed at sensitizing and involving site-level line managers in safety audits and other safety related responsibilities. Line managers were encouraged to take safety walks to motivate employees to adopt safe work ethics and prevent unsafe acts and working conditions. In another initiative the number of first aid boxes on shop floors was increased to make them easily accessible at any time. Over the last few years, JSPL’s Health & Safety Department has ensured that labels, indicators, posters, tags, and signs related to safety are appropriately displayed in the plant area to keep employees alert at all times to any potential danger.

Notably in FY 2014-15, there were zero recordable accidents at the company’s Raigarh cement plant, Raigarh mines and washery, Dongamahua Captive Power Plant (DCPP), JPL Tamnar, Patratu, Raipur and Tensa.
Some Examples of Safety Awareness Campaigns at JSPL Sites

**Angul:** JSPL’s Angul unit celebrated National Safety Week during 4-10 March 2015 with awareness programmes for workers, employees, children and community members in and around the plant. A mobile awareness campaign was launched where a van was driven across the plant, sensitizing employees and workers on safety protocols and precautions. A safety theme competition called ‘Safety King’ and fire-fighting and rescue drills were conducted.

**Raigarh:** Raigarh observed the National Safety Day on March 4, 2015, marking the culmination of the National Safety Week Campaign, which had started on February 25 with a safety rally.

**Tensa:** The TRB Iron Ore Mines in Tensa celebrated the 17th Mines Environment & Mineral Conservation Week under the aegis of the Indian Bureau of Mines, Bhubaneswar from January 27 to February 2, 2015. The mine was inspected on February 2 by IBM officials. The programme ended with a poster competition, a safety model exhibition, safety prize distribution and a cultural programme.

**DCPP:** JSPL organized a safety programme from January 19 to 24 focused on employee wellness. It featured yoga and ergonomics sessions and a mini-marathon. On one day of that week, employees abstained from having sugar. Also a thought-of-the-day competition was organized that required them to give one thought or make a poster related to health. The week included a fitness day during which all employees went through a BMI and BP test to find the fittest employee. It ended with the health reward day on which the best thought, poster and fittest persons were felicitated.
Since inception, JSPL has been gradually growing its CSR portfolio of projects. In FY 2014-15 a full review of CSR projects was undertaken on the lines of focusing the company’s CSR activities around 3 themes of

1. Education
2. Health, nutrition and population stabilization
3. Community Infrastructure development

In addition to the above 3 themes for CSR projects, JSPL’s overall social commitment emphasises on preserving a ‘Clean and Green Country’ in every region of the world JSPL operates in. This social commitment is embedded in every aspect of JSPL’s business, and is implemented so far mostly by the company’s Environment Management team.

Further, JSPL is engaged in activities that improve the state of our world both around its sites and way beyond. Such transformational activities are led by its Chairman Mr Naveen Jindal, himself.

This section of the Business Sustainability Report is a disclosure of the company’s social commitment around its operations (CSR) and beyond its operations.

Around JSPL’s Operations

The business operations of JSPL rejuvenate local economies and provide employment to local communities directly and indirectly. Since communities are a key stakeholder in its business operations, JSPL reaches out to them even before embarking upon its projects and this engagement turns into a lifelong relationship marked by benevolence and support. From consultative workshops to building relations with stakeholders to addressing potential challenges, such as individual or community concerns over its projects, JSPL attends to every social detail with compassion. It organizes workshops and conducts social impact assessment studies involving locals. This invests the company with an understanding of community expectations, which, in turn paves the way for co-creating value both for the company and local communities.

A brief description of JSPL’s flagship CSR projects are provided below. For details on all CSR projects JSPL publishes a dedicated CSR Report which can be obtained by writing to miniya.chatterji@jindalsteel.com or by visiting our website http://www.jindalsteelpower.com/sustainabilties/csr-approach.html.

**JSPL’S STRATEGY TO IMPROVE HEALTH OF LOCAL COMMUNITIES**

<table>
<thead>
<tr>
<th>Patient Identification + First Degree Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Vans 53</td>
</tr>
<tr>
<td>Sanjeevini 14</td>
</tr>
<tr>
<td>Vatsalya 26</td>
</tr>
<tr>
<td>Kishori Express 16</td>
</tr>
<tr>
<td>Chiranjeevi 17</td>
</tr>
<tr>
<td>Leprosy Nurses 18</td>
</tr>
<tr>
<td>Ambulance 19</td>
</tr>
</tbody>
</table>

**Diagnostics**

**Treatment**

Fortis Super Speciality Hospital

JSPL Hospital

---

53 Mobile dispensaries that tours surrounding villages continuously, equipped with 1 doctor and medicines
14 Medical dispensary, patients are examined and provided medicines here
16 Trained women volunteers continuously tour the surrounding villages to carry out pregnancy care, child birth, and adolescent health services.
17 Mobile van touring the surrounding villages for medical check-ups, haemoglobin tests, awareness generation and nutrition supplements of adolescent girls.
18 Women volunteers touring the surrounding villages to identify malnourished children and providing appropriate nutrition.
19 JSPL hospital for 24 hr emergency services for transporting individuals from local villages to a hospital.
JSPL’s STRATEGY TO EDUCATE THE NEXT GENERATION

**Build Education Institutions**

- OP Jindal Global University
- OP Jindal University
- Jindal School of Management, University of Texas
- Asha The Hope
- 5 Community Colleges
- 4 Industrial Training Institutes
- 5 Schools
- Anganwadis
- Arambh

Scholarships for School Students\(^1\)

Merit-cum-Means Scholarships

Sports - Football and Archery

Paying Community Teacher Salaries

---

A disclosure on JSPL’s CSR projects at each of the company’s operating sites is listed out as below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Health, Nutrition and Population Stabilization</th>
<th>Education</th>
<th>Clean and Green Country</th>
<th>Infrastructure Development</th>
<th>Others</th>
</tr>
</thead>
</table>

\(^1\) Merit-cum-Means Scholarships for school students of socially backward background  
\(^2\) A school for rehabilitation and empowerment of specially abled students.

\(^3\) A pre-school centre meant for the children in the community whose parents are working.
TT injections, iron tablets and also delivery. In return and for their pregnant women to appropriate doctors for antenatal check-ups, social workers make their visits at scheduled times for taking building relations as well as identifying pregnancy cases. These Sanginis who belong to the villages and visit every home for these objectives are achieved with the help of these Swasthya based trained women called Swasthya Sanginis this project has been catering to 38 villages around JSPL’s thermal power project and mines since 2010. Its primary objectives are to:

- Create awareness about anaemia
- Reduce IMR & MMR through ANC/PNC related awareness and service.
- Increase institutional delivery
- Create awareness about anaemia

These objectives are achieved with the help of these Swasthya Sanginis who belong to the villages and visit every home for building relations as well as identifying pregnancy cases. These social workers make their visits at scheduled times for taking pregnant women to appropriate doctors for antenatal check-ups, TT injections, iron tablets and also delivery. In return and for their service, the Swasthya Sanginis receive benefits. For example, for each delivery facilitated by them they get INR 150 from the Vatsalya project budget.

The percentage of safe deliveries in villages supported by JSPL stands at 75% as compared to a dismal 18% in the other villages thanks to Vatsalya.

VATSALYA (flagship CSR project in Tamnar): Involving 48 village-based trained women called Swasthya Sanginis this project has been catering to 38 villages around JSPL’s thermal power project and mines since 2010. Its primary objectives are to:

- Create awareness among communities on health related issues.
- Reduce IMR & MMR through ANC/PNC related awareness and service.
- Increase institutional delivery
- Create awareness about anaemia

This was a large infrastructure project. JSPL also provided CCTV facilities at major public locations. JSPL has supported the local communities by education their women, promoting sports and educating specially-abled people at the ASHA- The Hope centre.

ASHA - THE HOPE (flagship CSR project in Raigarh): It addresses the needs of the specially-abled, regardless of caste, creed, sex or socio-economic differences. This centre goes beyond providing therapeutic or educational rehabilitation and moves decisively to engage them in sustainable livelihood programmes. JSPL trains them in income generating vocational skills like screen printing, candle-making, tailoring and computers. They are also assisted in getting a disability certificate, pension, bus pass and loans through micro-finance schemes and other government benefits.

KISHORI Express (flagship CSR project in Angul): Kishori Express, as the name suggests, is dedicated to the cause of better health care for adolescent girls. Essentially, Kishori Express aims to improve the health of adolescent girls through regular medical check-ups, haemoglobin tests, awareness generation and nutrition supplements. Chiefly, it targets anaemia through timely detection and treatment. Kishori Express engages in disseminating knowledge on life skills, health and hygiene through a customised audio-visual touch screen quiz system. This project is being executed by JSPL through a Public Private Partnership with the National Rural Health Mission, Integrated Child Development Scheme and Zila Swasthya Samiti, Angul. In FY 2014-15 Kishori Express organized the haemoglobin test of 40999 girls of 301 villages.

Patratu

The CSR projects of JSPL at Patratu benefits local communities living in 15 villages located around its manufacturing facility. The projects include promoting sports, building toilets and combating malnutrition. For addressing health-related issues JSPL has established a tele medicine centre in association with Hewlett Packard (HP).

Teledicine Centre (flagship CSR project in Patratu): This centre aims to help people living in the 15 surrounding villages supported by JSPL can virtually consult doctors at the super speciality hospital in Raigarh.

Barbil

In Barbil, CSR projects have helped communities of 27 villages located around the site of JSPL. These projects have provided rural electrification to these villages, constructed community toilets and promoted sports.
Jindal Africa recognises education as one of the building blocks of a healthy community. It is our belief that a healthy community makes for a healthy and friendly operating environment and workforce. We extend our support through education initiatives, such as the SHG Management Training.

SHG Management Training
JSPL promotes the formation of Self Help Groups (SHGs), especially ones managed by women. Through JSPL’s CSR programmes, the company has built the capacity of SHGs/individual farmers in supplementary income generation activities like fishery, vegetable farming and poultry. At present, 529 Women through Self Help Groups are now networked and supported by the micro entrepreneurship promotion measures of JSPL. By imparting required training, capacity building and providing base capital and zero cost working capital support as well as appropriate linkages, the Company has enabled these SHGs to transform themselves to Self Help Entrepreneur (SHE) in manufacturing and marketing of herbal beauty care products, low cost sanitary napkins, food processing, market oriented terracotta products, jute products, incense stick making, tailoring and mushroom cultivation.

With the objective of regularizing the functioning of the SHGs, a 12-day training session was conducted in February 2015. The training was broken down into four batches of three days each. The curriculum covered “panchshtras”, various government programmes, importance of savings, proper book-keeping and maintenance of MIS. The prime objective of this effort is to shift the focus of SHGs from un-productive consumption to productive utilization of funds generated through savings.

JSPL’s CSR Activities in South Africa
At JSPL’s South African operations, CSR activities are aligned to the Social Labour Plan (SLP) on the basis of which funds are allocated towards CSR activities and committed towards upliftment programs in partnership with the Department of Mineral Resources. The SLP for South Africa impacts nine surrounding communities which range from proximity of a few kilometres to a maximum of 50km from the mine. JSPL has initiated a long standing rural requirement to electrify two of the mines nearest communities. Any community projects are identified in partnership with all local traditional councils, the local municipality and the socio economic demand of the prospective areas.

Continued efforts are adhered and practised towards progressive development on self-dependency and encouragement for practical skills for individuals and communal long-term prosperity. The company initiated a long standing rural health necessitated to community members, and has distributed much-needed supplies to local clinics and healthcare centres. The healthcare centres are not only about assisting those who are sick, but also tasked with providing much needed preventative health measures such as sex education, nutritional information, counselling facilities and HIV/AIDS testing.
Oman

At JSPL Oman, we work for the benefit of the Omani society with a special focus on local communities. Our construction projects, among them a multi-purpose hall, a children’s park and a football ground, have provided an opportunity for students to tone their skills. For adult education programs, we have donated a well-furnished school building and blackboards in the village of Nabr. In the health sector, we organize regular blood donation camps for our employees and also indifferent schools for the benefit of local communities. We also organize meetings to improve relations between Indian and Omani people.

We were committed to enter exciting phase with a rollout that includes the construction of a footpath on either side of the road leading to the Nabr village from the service road in Liwa and the donation of electrically operated wheel chairs. Also on the CSR agenda are distributed mobile phones in Liwa and the donation of electrically operated wheel chairs.

Adding to the list, in the present agenda, recently a public Majlis has been constructed for Al Jufra village community. Again to encourage young Omanis to participate more in sports activities, a football ground with all modern amenities is constructed for Al Hadi cub in Gaddafan. Making waiting sheds for schools in order to protect small kids from scorching summer.

Looking towards the health of Omani people, under Project Vision, several eye check camps were organized in recent past. Lot many poor adult’s eyes got tested and all of them were gifted with eye glasses to get benefitted in old age. Almost all schools in Liwa area has been covered under project Vision and hundreds of children who are detected with vision problem, CSR at JSPL Oman distributed eye glasses to all of them. Presently, after completing in all schools of Liwa Wilaya we are heading towards schools in Shinas to execute this project.

JSPL Oman is now committed to Al Noor blind association to make a multipurpose auditorium for the blind people inside the association compound. This auditorium, directly and indirectly, is going to help the blind people connected with Al Noor blind association, in numerous ways.

JSPL’s Emphasis on Preserving a ‘Clean and Green Country’

JSPL has a strong focus on the social commitment of keeping the country clean and green. For this the company first and foremost ensures that its operations operate within the prescribed standards. When a better technology is available with lower impact on environment, JSPL has moved ahead to adopt it. JSPL’s Coal Gasification Plant for steel production at Angul is one such example.

Apart from this JSPL has put in place equipment like electrostatic precipitators, scrubber systems, cyclones, bag-houses, waste heat recovery systems and water treatment plants. JSPL has also installed a centralised de-dusting system with an electrostatic precipitator for dust control. A sinter plant has been installed to collate all fines and usable wastes, which are used in the blast furnace.

JSPL has also established modern environmental laboratories at operation sites, equipped with instruments for conducting quality assessment of environmental parameters (air quality, water quality, noise) as well as emissions and discharges (stack emissions and liquid effluents). Its standard operating procedures, adhering to ISO 14000 benchmarks, ensure regular monitoring of energy consumption and conservation, waste generation and disposal, air and GHG emissions and noise.

Beyond Our Operations

The efforts of JSPL in FY 2014-15 have been to further strengthen the position of social commitment within its core business strategy. As demonstrated by the preceding sections of this Business Sustainability, the company has moved purposefully in this direction. This section of the report discusses three areas of intervention led by Chairman, Mr Naveen Jindal, which go beyond JSPL’s business operations and contribute significantly to improving the state of the world.

Education

JSPL has made substantial philanthropic contributions to the cause of providing education. Some of its educational institutions are located close to the company’s sites and are a part of its CSR programme. These activities provide education to local communities and have been detailed in the previous section, Around Our Operations. However, besides CSR, JSPL has built educational institutions and provides education in areas that are beyond JSPL’s site operations in India and elsewhere.

Chairman of JSPL, Mr Naveen Jindal, which has founded two universities in India. One of them, the OP Jindal University (OJU) started in September 2014 under an Act of Legislature in the state assembly of Chhattisgarh. Earlier, in January 2009, the Chairman had founded the OP Jindal Global University in Sonepat.
Deputy Chief of Mission, Embassy of Israel. The India–Pakistan Peace Conclave brought together students and faculty from Lahore University of Management Studies and O.P. Jindal Global University in a series of open house discussions. The purpose of the conclave was to chart out a common future for the two nations.

Winning the Legal Battle for the Rights of Indian Citizens to Fly the Indian Flag

As a young entrepreneur in the 1990s Mr Naveen Jindal, like many other people his age, took pride in the tricolour, but could not hoist it because of the laws prevailing then in the country. After completing his MBA he returned from the US, a country where the National Flag was allowed to be hoisted by its citizens. He wanted Indians to have the same right and moved the Delhi High Court with a writ petition under Article 226 of the Constitution. Eventually he won his legal battle for himself and the whole Nation. In 2002 the Union Cabinet announced that citizens will be free to fly the National Flag respectfully on all days from January 26, 2002. The Government subsequently issued a new flag code (Flag Code of India 2001), with guidelines for flying the National flag.

Subsequently, the Chairman of JSP, Mr Naveen Jindal set up the Flag Foundation of India (FFI) with the vision of instilling in citizens of India a sense of pride in the tricolor, India's National Flag. To achieve this, the FFI uses all possible means—music, art, photography, cultural programmes, festivals, seminars and workshops. Collaboration with civil society and advocacy groups, corporate houses, educationists and like-minded individuals, with a special focus on children and youth, is a part of its work.

Later, in 2009 JSP's Chairman Mr Naveen Jindal campaigned for and got a favourable ruling from the Ministry of Home Affairs on December 22, 2009, to let monumental flags be flown at night with appropriate illumination.

In March 2014, the FFI erected a 207-feet flag-mast bearing a 37-kg flag at the Central Park, Connaught Place, New Delhi in partnership with the New Delhi Municipal Corporation. In September 2014, a 207-feet flagpole was gifted to the Government of Afghanistan—Kabul's first and highest monumental flagpole.

Flag Duty Free Shops

Since September 2005 Indian citizens are allowed to purchase with Indian rupees at the Indian Tourism Development Corporation (ITDC) run duty free shops at airports. This was due to the efforts of JSP's Chairman Mr. Naveen Jindal who had taken up the issue with the government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee currency. It took him 3 years to convince the Indian government to allow transactions in India's national currency. It took him 3 years to convince the Indian government to do so. Mr. Naveen Jindal stated, “To my mind, when we are adopting a new symbol for the Rupee
Case Studies of JSPL's Business Sustainability

Case Study 1: Coal Gasification Plant at Angul

A group of students from Harvard University and MIT visited the steel plant of JSPL at Angul on Jan 18, 2015 as part of AsiaTrek (http://www.asialeadershiptrek.org/program-overview-27/) - a student leadership programme. On their return, they wrote a business case study on the coal gasification technology used for DRI by JSPL, for the first time in India. This is included as an internal resource at the library of Harvard University. Further, the students are in the process of publishing a book that would include chapters on the group’s key learnings from their travels in Asia. Below is the full version of the chapter that they have written on what they experienced in India.

**Introduction**

After visiting Japan, South Korea, Indonesia, and Malaysia on the Asia Leadership Trek, we arrived at our fifth stop: India. India’s growth story and the excitement around the newly formed government led by Prime Minister Modi featured in many of our discussions with leaders in other countries. When we arrived, the country was abuzz with preparations for President Obama’s impending visit and meeting with Modi. We were excited to have the opportunity to learn more about India’s plans for future growth and economic development from some of its most important business and government leaders.

Western media has discussed India’s growth story for well over a decade. Its economic progress was slow under the left-leaning government for several decades. Then, in 1991, India took steps towards becoming a free-market economy and proceeded to grow at a much faster rate, due in part to economic liberalization reforms. In the 2000s, India’s GDP grew at ~7-9% for more than a decade, driven by rapid growth in the services sector. In the early 2010s, however, India’s GDP growth and FDI flow experienced a slump. The country’s poor infrastructure, stringent labor laws, and overall difficulty in doing business (India was ranked #133 in the World Bank’s rankings on the ease of doing business in 2010) scared away the once-attentive domestic and foreign investors. But recently, after the election of a new pro-business government led by Prime Minister Modi, India’s GDP has once again started growing at a faster rate, and there is a new optimism globally about India’s growth prospects in the coming decades.

Despite its rapid economic development, India is often criticized for not growing in an inclusive way. Critics point out that most of the country’s recent economic development has been limited to the big urban centres, while people in the less-developed parts of the country continue to rely on traditional agricultural practices and live in poverty without access to high-quality healthcare, sanitation, and education. The inequality present in Indian society was evident to all of us on the Trek the minute we landed in the country and witnessed its high-rise glass buildings built next to slums and young children begging outside shiny malls. This divide extends beyond economic lines. Despite his popularity, Modi is regarded with suspicion by India’s religious and other minorities, who worry that his conservative Hindu ideals and seemingly blind eye when it comes to mounting tensions will exacerbate ethno-religious divides.

Dr Raghuram G. Rajan is the Governor of the Reserve Bank of India (RBI), and a major player in determining how India’s economy is steered. When we met with Dr. Rajan in Mumbai, he illustrated the sheer scope of India’s problem: it is no longer possible to follow the old growth path (first exporting textiles, then offering mass assemblies to industrial countries, and finally graduating to information economies). The industrial countries simply cannot provide the necessary demand.

If this worry seems too macro and abstract, consider a problem with concrete numbers: each year, 12-14 million Indians join the workforce. In other words, a new Australia’s worth of jobs is needed each year, if India is to keep people gainfully employed.

The economic and financial leaders of India thus face an array of challenges, among them figuring out how to develop domestic demand without slipping into inflation or a credit crunch; stimulating the creation of millions of jobs annually; and finding investors who will not drop ties at every social disruption. These tasks are some of the issues that keep Dr. Rajan up at night.

We also spoke in depth about India’s strategy for fostering industry and business formation. The Governor warned us that India does not have a good track record in picking industries to bolster and that Modi’s “make in India” campaign must focus on creating frameworks, infrastructure, human capital, and connectivity in order to succeed. It certainly must refrain from picking winners and losers by specific industry area.

Before closing, Dr. Rajan expressed concern for a topic that
would reassert itself at several points during our trip: regulation. In using the same coal-gasification technology to make steel in and downstream chemicals and fertilizers. Babuji was interested in preventing the import of oil and natural gas to South Africa, the Sasol in Secunda, South Africa. The plant produced synthetic natural gas derived from coal (specifically non-coking coal). This was summed up as “Do it well, do it in-house.” As a result of this decision, JSPL decided to use the Indian engineering system, L&T, to manufacture its gasifier units. This was a risky decision that set the plan back by at least two years, since L&T had never worked on manufacturing this technology before. By hiring them, JSPL was in a way paying for L&T’s learning curve. The decision cost JSPL precious time, but the investment paid off for India, as it contributed to the country’s skill, know-how, and overall technological progress. Land Acquisition Over the next few years JSPL carried out the painfully slow process of land acquisition—purchasing land from small-holders who lived where the future mine and plant sites would be located. Unlike in some countries with stronger eminent-domain policies, small-holders in India can resist selling for extended periods. The comptroller’s report itself did not mention anything about corruption, but the news reports elicited a flurry of accusations. On September 24, 2014, JSPL weathered another blow when the Supreme Court of India declared that the land allocations made in the coal industry in 1993 were arbitrary and illegal, since they were conducted without competitive bidding. JSPL and some of the other companies in the industry were informed that 214 of the 218 blocks (including the Angul coal block) that had been allocated in 1993 would be re-allocated through a competitive bidding process. Furthermore, JSPL and other companies would have an additional levy of an amount commensurate with the tax paid on coal exploration and mining rights during the period in which the coal was extracted.

JSPL started construction of a DRI furnace and steel facility in 2009. The plant was sited in a small district inside the state of Odisha, and strategically located less than five kilometers from a coal block. Developing all of the components on the same site and being able to transport coal from a nearby coal field would lead to greater efficiencies, larger profit margins, and a smaller environmental footprint. JSPL acquired the coal block in Orissa in 2003, through the procedures established by the government in 1993. The 1993 law enshrined the government’s preference for awarding coal blocks to companies willing to perform value-add activities with some independence from government extensions to the international raw-materials market. With the proper permits in hand, JSPL started thinking about technology. In South Africa, Sasol had partnered with Lurgi, a German engineering and technology company, to set up Secunda CTL. Jindal followed the same model in India, engaging Lurgi to license out its gasification technology to JSPL and to engineer several key processes critical to the plant.

The Promise of Coal Gasification Steel-making involves removing impurities from iron and combining it with other elements, such as nickel and vanadium. Steel-makers generally use two different methods to bring about this transformation. The first method is the basic oxygen method, which first uses an oxygen furnace to melt pig iron; then cooled oxygen and the other materials are used to remove impurities, prior to the alloy being introduced to the slag for final pouring. Though this approach is used in the majority of steel production worldwide, the high costs of blast furnaces, coke ovens, and other factory units make it an endeavor with a high upfront cost. The second method is the electric arc furnace method. This requires a reduction gas, i.e. natural gas, to reduce solid ore in the direct reduction process (DRI), in order to produce “spunge iron.” One major challenge for this approach is the relatively scarcity of natural gas. As Secunda and others have proved, however, the reduction gas can also be derived from coal (specifically non-coking coal). It was this last critical aspect—the possibility of deriving reduction gas from non-coking coal—that attracted Babuji and in turn his son Naveen to the coal-gasification technology used in South Africa. While India’s steel plants had heretofore relied on imported coking coal, which was necessary to run blast furnaces, a coal-gasification setup would allow Jindal Steel & Power Limited (JSPL) to make use of locally available Indian non-coking coal, turning it into synthetic gas or syngas and in turn using the syngas as a reducing agent to make steel. Some by-products (e.g. tars, ammonia, and sulphur) also have potentially high market value. Challenges Involved in Building the Angul Plant JSPL started construction of a DRI furnace and steel factory in 2009. The plant was sited in a small district in the state of Odisha, and strategically located less than five kilometers from a coal block. Developing all of the components on the same site and being able to transport coal from a nearby coal field would lead to greater efficiencies, larger profit margins, and a smaller environmental footprint. JSPL acquired the coal block in Orissa in 2003, through the procedures established by the government in 1993. The 1993 law enshrined the government’s preference for awarding coal blocks to companies willing to perform value-add activities with some independence from government extensions to the international raw-materials market. With the proper permits in hand, JSPL started thinking about technology. In South Africa, Sasol had partnered with Lurgi, a German engineering and technology company, to set up Secunda CTL. Jindal followed the same model in India, engaging Lurgi to license out its gasification technology to JSPL and to engineer several key processes critical to the plant.

The Promise of Coal Gasification Steel-making involves removing impurities from iron and combining it with other elements, such as nickel and vanadium. Steel-makers generally use two different methods to bring about this transformation. The first method is the basic oxygen method, which first uses an oxygen furnace to melt pig iron; then cooled oxygen and the other materials are used to remove impurities, prior to the alloy being introduced to the slag for final pouring. Though this approach is used in the majority of steel production worldwide, the high costs of blast furnaces, coke ovens, and other factory units make it an endeavor with a high upfront cost. The second method is the electric arc furnace method. This requires a reduction gas, i.e. natural gas, to reduce solid ore in the direct reduction process (DRI), in order to produce “spunge iron.” One major challenge for this approach is the relative scarcity of natural gas. As Secunda and others have proved, however, the reduction gas can also be derived from coal (specifically non-coking coal). It was this last critical aspect—the possibility of deriving reduction gas from non-coking coal—that attracted Babuji and in turn his son Naveen to the coal-gasification technology used in South Africa. While India’s steel plants had heretofore relied on imported coking coal, which was necessary to run blast furnaces, a coal-gasification setup would allow Jindal Steel & Power Limited (JSPL) to make use of locally available Indian non-coking coal, turning it into synthetic gas or syngas and in turn using the syngas as a reducing agent to make steel. Some by-products (e.g. tars, ammonia, and sulphur) also have potentially high market value. Challenges Involved in Building the Angul Plant JSPL started construction of a DRI furnace and steel facility in 2009. The plant was sited in a small district in the state of Odisha, and strategically located less than five kilometers from a coal block. Developing all of the components on the same site and being able to transport coal from a nearby coal field would lead to greater efficiencies, larger profit margins, and a smaller environmental footprint. JSPL acquired the coal block in Orissa in 2003, through the procedures established by the government in 1993. The 1993 law enshrined the government’s preference for awarding coal blocks to companies willing to perform value-add activities with some independence from government extensions to the international raw-materials market. With the proper permits in hand, JSPL started thinking about technology. In South Africa, Sasol had partnered with Lurgi, a German engineering and technology company, to set up Secunda CTL. Jindal followed the same model in India, engaging Lurgi to license out its gasification technology to JSPL and to engineer several key processes critical to the plant.

The Promise of Coal Gasification Steel-making involves removing impurities from iron and combining it with other elements, such as nickel and vanadium. Steel-makers generally use two different methods to bring about this transformation. The first method is the basic oxygen method, which first uses an oxygen furnace to melt pig iron; then cooled oxygen and the other materials are used to remove impurities, prior to the alloy being introduced to the slag for final pouring. Though this approach is used in the majority of steel production worldwide, the high costs of blast furnaces, coke ovens, and other factory units make it an endeavor with a high upfront cost. The second method is the electric arc furnace method. This requires a reduction gas, i.e. natural gas, to reduce solid ore in the direct reduction process (DRI), in order to produce “spunge iron.” One major challenge for this approach is the relative scarcity of natural gas. As Secunda and others have proved, however, the reduction gas can also be derived from coal (specifically non-coking coal). It was this last critical aspect—the possibility of deriving reduction gas from non-coking coal—that attracted Babuji and in turn his son Naveen to the coal-gasification technology used in South Africa. While India’s steel plants had heretofore relied on imported coking coal, which was necessary to run blast furnaces, a coal-gasification setup would allow Jindal Steel & Power Limited (JSPL) to make use of locally available Indian non-coking coal, turning it into synthetic gas or syngas and in turn using the syngas as a reducing agent to make steel. Some by-products (e.g. tars, ammonia, and sulphur) also have potentially high market value.
This additional levy and redistributions would have a huge financial impact on the Angul plant. JSPL went along with the Government's decision, duly paid the additional levy, and hoped that it would receive a fair chance at re-bidding for the Angul coal block. As promised, the government reallocated each of the 214 coal blocks towards either power production or iron/steel production. But the Angul coal block was delineated as a power-sector block, which implied that it could not be used by JSPL's Angul plant for steel production. JSPL filed a petition at Court against this decision, and the Court instructed the government to explain the basis of its allocation of the block. In February 2015, JSPL won back two of its other coal blocks in the bidding process. However, a few weeks later the government rejected JSPL's bids for the two blocks, citing them as "outliers" because they were lower than the winning bids for other, similar blocks. The government said that it would take a final decision on those mines only after further examination of the bidding process and prices and that it would consider the option of giving away these mines to either Coal India or the state governments.

Within hours, Naveen Jindal wrote the following words in a letter to all employees of JSPL: "We have played by the rules of the bidding process and firmly believe that we have been unfairly treated. We need to respond to this challenge with all our strength and resilience. We will do everything to protect our interests."

For the coal-gasification technology to remain viable and operate sustainably, a captive coal block is quintessential. Coal at a higher price would make the technology financially unviable, ultimately impacting the entire process of steel-making. Also, the coal supply had to be close to the site, since the process requires that the coal be freshly mined and immediately gasified. A consistent supply of the same coal needs to be provided to avoid variation in the performance of the technology.

The Angul Plant Today

At the time of writing, the Angul plant runs at 50% capacity but is steadily ramping up; it is anticipated to reach 80% capacity over the next few months. The government's reversal of the bidding process and prices for the Angul coal block is currently under review by a technical committee. Even though the coal-gasification technology itself has proved to be more environmentally sustainable than other commonly used steel-manufacturing processes, its future in steel production depends on the decisions made by the Indian government and courts.

Sitting in his private plane en route to visit the Angul plant, Naveen Jindal set out for us the best- and worst-case scenarios. If JSPL wins the court case to re-designate the Angul coal block as a steel-production block, he will have the chance to bid for the block, hopefully win it, and then implement his plan of using Angul coal to make more environmentally-friendly steel. If the block remains designated for power, JSPL could still bid for it and use it to fuel one of its power plants nearby. However, this power plant is a 180MW plant, costs approximately $1 billion in investment, and has the potential to employ 1,000 local workers. In comparison, the Angul steel plant is a $3+ billion investment and employs 1,500 workers currently, a number that will probably increase as the plant reaches a higher capacity. Without the neighboring coal block, the Angul steel plant would need to bring coal from a greater distance, at a minimum of twice the cost. Moreover, coal bounces and grinds as it travels, which leads to more powder, or fines, that are unusable at the plant.

Naveen sighed, stared out the window, and wondered how he should proceed in order to make his father's vision of a more environmentally friendly steel plant come to life.

Conclusion

We believe that there is a lot to be learned from this case study about the roles that government and the private sector play in the economic development of a country. Our meetings with India's top businessmen and government leaders during the Asia Leadership Trek, made it clear to us that India is at a critical juncture right now, with a high GDP growth rate, a favorable demographic dividend that will last for the next couple of decades, an educated and English-speaking workforce, rapidly increasing internet and mobile-phone penetration, and many other ingredients for economic success. History suggests that the private sector will play a dominant role in driving the country's economic development through job creation, workforce development, and investments in infrastructure and technology.

However, as highlighted by Dr. Rajan in our meeting with him, in order to maintain sustainable growth, the government needs to provide necessary regulatory support and protection to the private sector and the country's citizens. While there is undoubtedly more complexity in this case than meets the eye, dilemmas like the one faced by JSPL have discouraged investment by private companies in India's less developed regions, especially among foreign investors who are less familiar with the country and more skittish in times of change. In order to attract investment, the government must do more to make the country business-friendly while maintaining a focus on pro-poor, inclusive growth.

The new government, led by Prime Minister Modi, is heavily focused on making India an easier place to do business; it has softened labor laws by making hiring and firing easier and liberalized key sectors to facilitate foreign investment. The administration also passed an ordinance whereby industry can acquire land from farmers more easily. Yet, while a lot of these business-friendly policy initiatives are well-intentioned, India has historically struggled with the implementation of such policies, due to rampant bribery and corruption in middle and lower layers of the government. Modi has discussed improving governance and transparency to eliminate corruption, a reform that, if successful, would help overcome the concerns around policy implementation over the next few years. Since our visit however, Modi's popularity seems to have dwindled. How his government reacts to the recent collapse of an industry-backed land reform bill, recovers from a much-criticized proposal to limit the RBI's monetary policy powers, and rises to critical social policy challenges will play a large role in shaping India.

We feel fortunate to have had the opportunity to visit and learn about India from some of its top leaders at such an exciting and optimistic point in the country's growth story. The country's future depends on the government's ability to provide necessary support to the private sector, however, concerns about the inclusiveness of India's growth are valid, and we hope that the government will continue to prioritize social policies involving healthcare, education, and workforce training, in addition to promoting business-friendly policies.

Exhibits

Exhibit 1. Diagram of the Lurgi Dry-Ash Gasifier (http://www.netl.doe.gov/research/coal/energy-systems/gasification/gasifipedia/lurgi)
Case Study 2:
A More Environment Friendly Way for Steel Production

The Global Compact Network India (GCNI) which is United Nations Global Compact’s Indian arm has included JSPL’s coal gasification technology for DRI as 1 of 19 Best Sustainability Practices in India. A specific Case Study on this technology was included in GCNI’s compendium on Best Sustainable Practices in India, launched in February 2015 at their Annual National Meeting. The Case Study as has been published by GCNI in their compendium is reproduced in the pages that follow.
Jindal Steel & Power Limited

Jindal Steel and Power Ltd (JSPL) is a US $ 3.9 billion business conglomerate with a dominant presence in steel, power, mining and infrastructure sectors. The company has a workforce of 15,000 people. JSPL produces innovation-driven energy-efficient steel and power through backward and forward integration. The company has operations in Chhattisgarh (India), Jharkhand (India), Odisha (India), Oman, Georgia, Mozambique, Botswana, South Africa, and Australia.

JSPL’S BUSINESS CASE FOR SUSTAINABILITY

JSPL ranks sustainability as one of its top priorities. Sustainability as a principle is embedded in JSPL’s core business operations. In placing sustainability at the forefront of its overall business operations, JSPL has created a cross-functional Sustainability Division to ensure overall quality and holistic growth of the company.

Adapting for a Green Economy has been a priority for JSPL. This has led the company to invest in advanced technologies like Tap Recovery Turbines and Coke Dry Quenching, to ensure that they minimise the environmental impact of the company’s activities.

JSPL focuses on compliance of all 10 UNGC principles with a special focus on principle 9.1 - “Encourage the development and diffusion of environmentally friendly technologies.” This has been achieved by investing in latest technologies and in-house innovations towards energy efficient and lesser polluting steel production, which ensures JSPL is on the path of holistic growth, caring for all its stakeholders and the planet.

JSPL’s approach to sustainability also focuses on the establishment of a unique organisational structure which helps ensure that proper business practices are efficiently communicated across the entire organisation. The Sustainability Division at JSPL is responsible for business strategy at plant sites, as well as doing responsible and sustainable business. The team of Sustainability Officers is embedded in all plant locations, led by a Group Chief Sustainability Officer who is physically located next to the Group’s Chief Executive Officer in Delhi, and reports to him.

OPPORTUNITIES FOR INTEGRATING SUSTAINABILITY

Being a company which has always been associated with the steel, power, and infrastructure sector and being one of the country’s largest conglomerates, JSPL has faced several challenges while addressing environmental concerns but has kept its reputation of being an environmentally conscious company intact by making constant efforts to address these issues.

The major challenges faced by the company can be discussed on two levels:

- **First**, the sectors in which JSPL operates are energy intensive and are a contributor to man-made Green House Gases (GHG) emissions. These sectors are normally dependent for energy on fossil fuels for energy.

- **Second**, JSPL is a responsible company that is actively engaged in limiting its carbon footprint. However, climate change policy measures may induce in future GHG emission caps on JSPL’s businesses. It is therefore a major challenge to manage all operations by focusing on energy efficiency and reducing GHG emissions.

JSPL invested its resources for over 3 years to build India’s first Coal Gasification for DRI plant, which is a highly energy efficient method of steel production. This process has a lesser impact on the environment as compared to the combustion process – the carbon dioxide emitted in the process is entirely absorbed back into the process and the hydrogen sulfide emitted in air is converted into sulfur. Also, the coal gasification plant uses non-coking coal which is more readily available than coking coal. This helps the company reduce its energy consumption and hence GHG emissions.

The coal gasification plant also has 7 by-products viz. gasification oil, rectorite, naphtha, clear tar, phenolic pitch, deepheather (tar), ammonia, and sulphur which can be further used as fuel or feedstock for extracting chemicals and all, industries for mixing with paints, varnishes, etc.

Further, the company has invested in technologies which help in recovering energy from exhaust gases and hence make production processes efficient. These technologies help reduce consumption of natural resources and also help cut GHG emission.

Finally, JSPL is also investing in a large portfolio in solar and wind energy. The company has installed various off grid solar power street lights and small solar power plants to harness available solar energy. JSPL also has assets in wind energy.

MEASURING IMPACTS

The most important cornerstone for maintaining a check on the sustainability operations of the company is the establishment of processes in place to measure the impact of these operations.

JSPL has put the following procedures in place for impact measurement:

- A Sustainability Performance Management System which consolidates and monitors all relevant aspects of sustainability. This system is based on a dedicated portal, which helps in regularly monitoring and analyzing close to 600 sustainability parameters. This also helps JSPL in creating a comparative benchmark for itself vis-a-vis other companies in the industry.

- The company regularly conducts self and third party assessments to estimate the number of lives improved by its social programmes and activities.

- JSPL has established robust policies for human rights, employee well-being, energy,
Case Study 3: Watershed Development in Odisha

JSPL has one of its largest operations in Angul, Odisha. Its environmentally friendly coal gasification plant is also based here. The company works closely with local communities to share and co-create value for them. One such initiative was the development of watersheds in the area.

Resolving the region's issues of soil erosion, deforestation and sedimentation of water harvesting structures, would involve an integrated water management system that brings into play measures like conservation of fertile soil, runoff harvest, recharging ground water, introduction of new crop varieties and traditional agriculture practices. The system would help enhance the incomes of the village community through superior crop and livestock management.

The two key objectives of the Watershed Management Project are:
- To enhance agricultural production and productivity through better crop management and horizontal and vertical expansion of the net cropped area as a result of ground water recharge and soil erosion control.
- To enhance equity-based income in rural families and ensure holistic socio-economic development of the community.

Approach

NABARD was identified as a potential agency and a highly credible partner. An NGO, highly experienced in implementing watershed projects was chosen by the community as the implementing partner. An NGO, highly experienced in implementing watershed projects was chosen by the community as the implementing partner and a multi-party agreement was signed amongst these organizations in the presence of village watershed committees of Jaykissan and Kalapata watersheds, first in November 2012 and later on February 28, 2013 for full-scale implementation. A geographical area of about 1400 hectares was covered as a part of the project.

The project villages are located in an undulating and sloping terrain with heavy soil erosion. Most of population in the project area depend on agriculture and allied activities for their livelihood. These areas suffer from problems of low crop productivity due to soil erosion, poor water management and lack of exposure to new crop technologies even though annual rainfall is satisfactory. The major challenges faced were:

- Soil weathering & degradation of fertile top-soil: Heavy rainfall and light soil in the area resulted in severe soil erosion thus leading to formation of rills and gullies. The surface runoff causes loss in the fertile top-soil.
- Conventional agriculture practices & lack of irrigation facilities: The farmers were very poor and their ability to take risk and invest in necessary inputs for optimizing agriculture was low. The area was prone to water logging situations due to clogged natural drainage system. The farmers had fallen into a vicious cycle as reflected in the figure below.
- Reduced productivity of livestock: Unscientific animal husbandry practices were associated with scarcity of good quality fodder for cattle resulting in low milk yield. In the absence of proper market linkages, the dairy farmers failed to get a good price for milk and other dairy products.
- Lack of employment opportunities: On account of depletion of natural resources, the scope for agricultural labour was low resulting in seasonal poverty induced migration. Lack of awareness about bank credit and market linkages and defaulter issues became a barrier to their seeking self-employment.
- Existing village dynamics: Poor health and hygiene practices were prevalent. Gender inequity, ignorance about government schemes and absence of strong community-based organizations were other issues. There were no distinct leaders in the village leading to unstable village dynamics.

The project was divided into six phases:

1. Mandatory Shramdaan Completed
2. Net Planning Completed
3. Capacity Building Phase (CBP) Completed
5. Full Implementation Phase (FIP) Ongoing
6. Handing over of assets and maintenance fund to the Community Institutions Yet to be started

Terminology

**Basic details of watershed development project**

<table>
<thead>
<tr>
<th>Name of Watershed</th>
<th>Name of Villages</th>
<th>Name of Gram Panchayat</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay Kissan</td>
<td>Tubey, Maratira, Kulei</td>
<td>Samantraur, Tubey</td>
<td>Tubey</td>
</tr>
<tr>
<td>Kalapata</td>
<td>Derjiang, Madhiamunda</td>
<td>Tubey</td>
<td>Tubey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparation of Detailed Project Report (DPR)</td>
<td>Completed</td>
</tr>
<tr>
<td>2. Net Planning</td>
<td>Completed</td>
</tr>
<tr>
<td>3. Capacity Building Phase (CBP)</td>
<td>Completed</td>
</tr>
<tr>
<td>4. Feasibility Study Report (FSR)</td>
<td>Completed</td>
</tr>
<tr>
<td>5. Full Implementation Phase (FIP)</td>
<td>Ongoing</td>
</tr>
<tr>
<td>6. Handing over of assets and maintenance fund to the Community Institutions</td>
<td>Yet to be started</td>
</tr>
</tbody>
</table>

The project villages are located in an undulating and sloping terrain with heavy soil erosion. Most of population in the project area depend on agriculture and allied activities for their livelihood. These areas suffer from problems of low crop productivity due to soil erosion, poor water management and lack of exposure to new crop technologies even though annual rainfall is satisfactory. The major challenges faced were:

- Soil weathering & degradation of fertile top-soil: Heavy rainfall and light soil in the area resulted in severe soil erosion thus leading to formation of rills and gullies. The surface runoff causes loss in the fertile top-soil.
- Conventional agriculture practices & lack of irrigation facilities: The farmers were very poor and their ability to take risk and invest in necessary inputs for optimizing agriculture was low. The area was prone to water logging situations due to clogged natural drainage system. The farmers had fallen into a vicious cycle as reflected in the figure below.
- Reduced productivity of livestock: Unscientific animal husbandry practices were associated with scarcity of good quality fodder for cattle resulting in low milk yield. In the absence of proper market linkages, the dairy farmers failed to get a good price for milk and other dairy products.
- Lack of employment opportunities: On account of depletion of natural resources, the scope for agricultural labour was low resulting in seasonal poverty induced migration. Lack of awareness about bank credit and market linkages and defaulter issues became a barrier to their seeking self-employment.
- Existing village dynamics: Poor health and hygiene practices were prevalent. Gender inequity, ignorance about government schemes and absence of strong community-based organizations were other issues. There were no distinct leaders in the village leading to unstable village dynamics.

The project was divided into six phases:

1. Mandatory Shramdaan Completed
2. Net Planning Completed
3. Capacity Building Phase (CBP) Completed
5. Full Implementation Phase (FIP) Ongoing
6. Handing over of assets and maintenance fund to the Community Institutions Yet to be started

Terminology

**Basic details of watershed development project**

<table>
<thead>
<tr>
<th>Name of Watershed</th>
<th>Name of Villages</th>
<th>Name of Gram Panchayat</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay Kissan</td>
<td>Tubey, Maratira, Kulei</td>
<td>Samantraur, Tubey</td>
<td>Tubey</td>
</tr>
<tr>
<td>Kalapata</td>
<td>Derjiang, Madhiamunda</td>
<td>Tubey</td>
<td>Tubey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparation of Detailed Project Report (DPR)</td>
<td>Completed</td>
</tr>
<tr>
<td>2. Net Planning</td>
<td>Completed</td>
</tr>
<tr>
<td>3. Capacity Building Phase (CBP)</td>
<td>Completed</td>
</tr>
<tr>
<td>4. Feasibility Study Report (FSR)</td>
<td>Completed</td>
</tr>
<tr>
<td>5. Full Implementation Phase (FIP)</td>
<td>Ongoing</td>
</tr>
<tr>
<td>6. Handing over of assets and maintenance fund to the Community Institutions</td>
<td>Yet to be started</td>
</tr>
</tbody>
</table>
The project was conceptualized in August 2011 followed by 300 days of mandatory Shramdaan contributed by the village community of the four project villages. This was a prerequisite for the approval of the project by NABARD. Once this was sorted out, the project was approved by NABARD on December 28, 2011 and the Capacity Building Phase (CBP) work started in January, 2012.

Once the capacity building, feasibility and DPR stages were completed, implementation began with the aim of reducing soil erosion. Soil erosion was minimized through the creation of physical earth structures for obstructing and retarding the flow of running water along the slope and thereby the water getting time to recharge the ground water table. Biomass conservation has been brought through massive plantation and grass bedding.

Changes in cropping patterns and formation of Self-Help Groups (SHG) also propelled the project forward. Mono cropped area was converted to double- and triple-cropping areas. SHGs have been formed/revived and linked with local banks for credit linkages and women focused micro-enterprises. Linkage to local markets was also provided to these micro-entrepreneurs as a part of the project. Village-level institutions like youth clubs, common interest groups, water-user groups, and farmers’ clubs were initiated and strengthened. Additional livelihood opportunities were also created for wage labourers through earthwork, drainage line treatment and asset creation in the project villages.

Monitoring and Continuous Improvement

The progress of the work under the Integrated Watershed Management Project is monitored by the funding agencies through periodic field visits, monthly and quarterly planning and progress reports, fund utilization certificates, sustainability monitoring and self-monitoring by village watershed committees.

Key Achievements of the Project

- 126 acres of un-cultivable fallow land has been turned cultivable thus increasing agricultural production and productivity through horizontal and vertical expansion in net cropped area and About 350 Acres of mono crop land have been converted into double cropping.

Basic details of watershed development project

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Watershed</th>
<th>Slope Point</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Dt.11.6.2013 (Feet)</td>
<td>BGL</td>
<td>Dt.30.05.2014 (Feet)</td>
<td>BGL</td>
</tr>
<tr>
<td>1</td>
<td>Jay Kissan</td>
<td>High</td>
<td>24.6</td>
<td>21.95</td>
<td>19.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Med</td>
<td>19.8</td>
<td>18.60</td>
<td>17.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>17.6</td>
<td>16.90</td>
<td>15.65</td>
</tr>
<tr>
<td>2</td>
<td>Kalapata</td>
<td>High</td>
<td>17.55</td>
<td>15.70</td>
<td>14.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Med</td>
<td>15.20</td>
<td>14.20</td>
<td>13.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>12.50</td>
<td>11.30</td>
<td>10.85</td>
</tr>
</tbody>
</table>

Key Interventions

- Free interventions
  - trees
  - soil erosion
  - water recharge
  - soil and moisture conservation
  - biomass conservation and regeneration
  - plant protection and social forestry
  - wage hiring
  - migration
  - strengthening of village level institutions
  - promotion of micro enterprises through SHG
  - marketing facilitation of local produce

Approach

- Social ban on free grazing and tree cutting enforced by gram sabha
- Soil erosion was controlled through creation of physical earth structures for obstructing the flow of running water, giving the time to recharge the groundwater table, leading to minimum soil erosion.
- Afforestation was begun through massive plantation. Mono cropping was converted to double cropping and triple cropping.
- Wage generation was augmented through engaging community in earthworks for area and drainage line treatment and asset creation in the project villages.
- Several village-level institutions like youth clubs, common interest groups, farmers’ interest groups, water user groups, farmers’ clubs and self-help groups have been formed strengthened.
- Women-focused micro enterprises have been created with linkage to the local market.

Here are a few of the large number of activities that were taken up as a part of the project:

- About 90 Acres of mono crop land have been converted to triple crop land
- Drainage line treatment and creation of physical structures have improved the groundwater table. More than 35000 saplings have been planted reducing soil erosion.
- The VWC has been strengthened with greater decision-making powers and comprises of 40% women members thus reducing gender inequity in decisions regarding Common Property Resources.
- Cultivation of major food crops has increased by an average of 50 % thus reducing hunger and malnourishment.
- Promotion of microenterprises with bank credit and market linkages has provided sustainable livelihood options to SHGs, marginal farmers and landless labourers.
- Increase in groundwater table in the region by building physical structures.
Case Study 4: The Role of Steel in Stabilizing India’s Population

A concept note was prepared by Hindustan Latex Family Planning Promotion Trust for creating JSPL Steel Vending Machines for Female & Male Condoms in India. Below is the full version of this concept note.

Background

In March 2012, female condoms were listed by the United Nations Commission on Life-saving Commodities for Women and Children as one of the 13 high-impact, effective, but overlooked tools that “if more widely accessed and properly used, could save the lives of more than 6 million women and children”. Designed for vaginal insertion, the female condom is the only dual protection method that women can initiate and use without their partner’s active participation and without any medical supervision, providing women with control over safer sex, their health, and health of their family. It is regarded as the only woman-initiated family planning method.

The Challenge

While the popularity of the female condom is growing internationally, it has not really picked up pace in India. Conservative views about sex, high cost, poor awareness, ignorance on functionality, and misconceptions about the product discourage stores from stocking it and people from buying it despite its introduction almost two decades ago. A few attempts to set up vending machines for male condoms in India have failed to be effective in the past because of 1. Vandalization of machines and 2. Shyness to buy condoms in an open public area.

Objective

• To stabilize India’s population growth in a unique way that actually empowers women. Increase accessibility and availability of female and male condoms in secured locations (minimising chances of vandalization) where (especially) female condoms can be accessed in privacy.
• To affect a massive behaviour change and get women to be in control of their pregnancies and family planning.

Proposed Intervention

JSPL in partnership with HLFPPT (promoted by HLL Lifecare, a Government of India enterprise) plans to roll out female condoms for general population through an innovative service delivery channel. This would be a breakthrough innovation to make condoms accessible to the general population using web-based inventory-controlled electronic vending machines placed in discreet locations. These machines would be made with steel facilitated via JSPL.

Operational Model

The project would be implemented through a partnership between JSPL and HLFPPT. JSPL would facilitate steel at a nominal price to HLFPPT, which would make the vending machines. The HLFPPT would source condoms both male and female from its parent organization HLL Lifecare Limited. These specially designed vending machines are small, clean and good looking. They can be easily placed at discreet locations in public areas. They would dispense both male and female condoms on the insertion of money, equivalent to the subsidised cost of the condoms. JSPL would encourage a large number of companies to spend a part of their CSR funds on buying these machines from HLFPPT. The machines will bear a small logo of the company that has sponsored it. This way the programme can achieve scale.

In addition, HLFPPT would be responsible for the maintenance of these machines on an AMC basis. It will also attend to the supply and loading of condoms in these vending machines and cash flows. As an implementing partner, HLFPPT would leverage its over eight years of experience in the field of female condoms and through a mapping exercise identify locations for the vending machines. Thereafter it would conduct behaviour change campaigns to create consumer awareness and demand. The key communication messages would focus on the benefits of female condoms, STI/HIV prevention, contraception and unique product attributes.

This is critical for mobilizing broad-based support and sustained demand. Efforts would be made to “de-stigmatize” female condoms. For each target group, an effective communication strategy, including context and target group specific messaging, would be designed. To ensure its success, HLFPPT would undertake outreach activities and station female condom peer educators (PE) at the community level. These PEs would act as points of reference in the community for any information about female condoms. They would train key community members about how to use FCS and key misconceptions about it.

This would offer both female and male condoms from sophisticated vending machines placed at discreet locations in public areas room for general population.

A JSPL Steel Vending Machine for Female and Male Condoms placed at JSPL corporate office in New Delhi
Case Study 5: JSPL’s Business Case for Creating Skill Centre Inside the Manufacturing Site

Background
Back in 2011, JSPL Barbil as a unit faced challenges concerning with employee productivity. Pellet Plant I of 4 MTPA was operational and Pellet Plant II of 4 MTPA was in project stage. Since we were doubling our capacity, we needed equipment and multi skilled operators to run both the plants. It has become imperative for us to devise a way of working where the traditional divisions between work areas and separate disciplines are removed, and individuals are given responsibility for a range of different types of task. Under such circumstances, we had to employ our best practices to carry out the tasks and has an awareness of their operating bounds.

Subsequently a need was felt to build a separate Learning Centre so as to achieve the following objectives as far as Learning & Development is concerned:

- Achieve sustainable development.
- Optimizing Production Cost.
- Increase Productivity without compromising Quality.
- Customer Satisfaction.
- Develop a Multi-Skill Inventory

Best Practices in Learning & Development

1. Mapping the Knowledge and Skills:
   Our first and foremost endeavour was to map the knowledge and skills of our frontline engineers, supervisors and workers. Mapping was done for knowledge and skills on the relevant machine components, equipments and processes. Knowledge was mapped through assessment tests on the relevant machine components, equipment and processes. Similarly, feedback was collected from the supervising officer to gauge the skills of the person.

   Once Knowledge & Skill Mapping was completed, we arrived at the training needs of every frontline engineer, supervisor and worker. The training needs identified were further analysed and subsequently training plan was created to train our people.

2. Building a Learning Centre:
   The second endeavour was to create a Learning Centre facility that would be equipped with all the modern facilities as far as Learning & Development is concerned. Close to around 100 people (48 Jindal Employees across all functions and around 50 contractor employees) worked in total collaboration and a Learning Centre was built in 4 months which contains around 330 cut models of all equipments in pellet plant related to Operations, Maintenance, Electrical and Instrumentation. Each and every model laid down at Skill Centre has been made by cutting the equipment at a sectional angle (via lathe machine) to demonstrate what is inside and how that particular equipment or component of the machine operates. None of the models (except one) have been purchased separately and all have been built by re using the scrap machines of the plant. Further, a prototype model of the entire Pellet Plant equipments has been made to demonstrate Pelletization Process clearly indicating the input raw materials and the output product.

   The foundation stone of the Learning Centre was laid down on September 1st 2014, and in a short span of 4 months, a centre for Learning was built with the help of a highly motivated cohesive cross-functional team and on finally it was inaugurated on 18th December 2014 by Honourable MD & Group CEO Mr. Ravi Uppal.

3. Build a Pool of In House Trainers:
   An added challenge was to equip the training centre with in house trainers who would be skilled enough to prepare training modules and thereafter conduct in house trainings to train and transfer their learning to develop their subordinates. Therefore, a Train The Trainer Programme was conducted for 18 In House Trainers by an external Training institute at our Unit and they went through a certification course to be formally inducted as our In House Trainers.

4. Preparing Training Modules and Conducting Trainings In House:
   On successful completion of their certification course, our In House Trainers began preparing modules of their respective training topics based on the machine components, specific equipments and processes. With the availability of the Learning Centre, Classroom trainings conducted began to be followed...
by a Model Training to aide in the clear understanding of the concepts being taught in the classroom. A practical exposure of the theoretical concepts was very much required; hence efforts were made to incorporate cut models of smallest of equipments in the plant.

5. Preparing Reference Pocket Manuals:
   It is a known fact that whatever is taught in a training programme, a trainee retains only a few percentage of it and the knowledge begins to fade away with time, unless there is a frequent revision of the concepts. Hence, the need arose to create Reference Pocket Manuals of all machine components, specific equipments and processes. The basic purpose of the pocket manual is to keep it in the pocket and refer to the concepts mentioned in the manual as and when required on the shop floor. All pocket manuals were made in house with immense help from our In House Trainers who prepared respective pocket manuals for their respective training programmes.

6. Preparing One Point Lessons and Conducting On Job Trainings:
   For easy reference in the shop floor and enhancement of knowledge and skills related to operations and maintenance, several One Point Lessons (OPLs) were made for all machines. Reference to one point lesson would serve as a quick reference as to which is a correct mode of operation and which is not.

   Simultaneously, impetus was given on On Job Trainings (OJTs) at the shop floor. All the OPLs were prepared by our frontline engineers and operators and knowledge was shared by conducting On Job Trainings at the shop floor.

   All OPLs were prepared by our frontline engineers and operators and knowledge was shared by conducting On Job Trainings at the shop floor.

   Results of the Break-through Initiative

   Implementing the best practices in Learning & Development turned out to be break through initiative that phenomenally increased the frequency of knowledge sharing thereby contributing to increase of training man days by 25% at classroom trainings, model trainings or on job trainings. However, the prime challenge was to map the effectiveness of trainings and align them directly to business.

   We started following the 4 steps of Kirk Patrick Model to gauge the effectiveness of trainings wherein we were able to collect the Reaction of the trainees after a training programme, Learning Index through a pre and a post test and the Behavioural Changes of the trainee from the Reporting Officer.

   There were certain Key Performance Indicators (KPIs) deliberated at management level which would help us in enhancing the productivity. The aim of the break through initiative was to:

   1. Reduce the breakdowns due to lack of knowledge and skills.
   2. Reduce the quality defects due to lack of knowledge and skills.
   3. Reduce the accidents due to lack of knowledge and skills ; and
   4. Increase in employee morale and Improvement of Knowledge and skills.

   Learning & Development team further framed a set of Key Activity Indices (KAI’s) – activities that would help in achieving all the KPIs – including Operator Skill enhancements and training the employees along with the knowledge gained during the major process would help in the improvement of skills of the employees along with the knowledge gained during the classroom trainings.

   Awards and Recognitions FY 2014-15

   JSPL

   - ‘Excellence Award for Pioneering Efforts’ in the field of Coal Gasification in India given by the Mission Energy Foundation to Mr. Naveen Jindal
   - ‘National Award for Excellence in Energy Management’ given by CII to JSPL in 2014
   - ‘National Award for Innovative Training Practices’ given by ISTD Delhi to JSPL in 2014
   - ‘Dun & Bradstreet – Infra Award 2014’ in the power category given to JSPL
   - Two ‘Green Leaves’ awarded by Centre for Science & Environment (CSE) to JSPL, Raipur in 2015
   - ‘Chhattisgarh Industrial Health & Safety Award’, for endeavours to facilitate health and safety given by the Government of Chhattisgarh to JSPL in 2014
   - ‘Prize for Innovative HR Practices’ given by the Global HR Excellence Awards to JSPL in 2015
   - ‘Award for Best CSR Practice’ in the category of Education given by Think Media Inc. to JSPL in 2014
   - ‘Award for Project Excellence’ given by Global Symposium to JSPL in 2014
   - ‘PARR Excellence Award for SS Implementation and Technical Paper Presentation’ given by QCFI to JSPL in 2013
   - ‘Procurement Excellence Award’ for being an ‘Outstanding Leader in Procurement’ given to JSPL at the 2nd Annual CPO Forum 2014 by Aditya Birla Awards to JSPL in 2014
   - ‘Innovation in Employee Retention Strategies’ given by Greentech Foundation to JSPL in 2014
   - ‘Award in the 2nd Best category for Overall Mining’ – Mega Mines Group given by the Annual Safety Fortnight Competition to JSPL in 2015
   - ‘Award for Outstanding Leader in Procurement’ at the Conference Asia Chapter to JSPL in 2014

   Angul

   - ‘Mission Energy Foundation - Team Award’ for ‘Operational Excellence’ for India’s first Gasification Plant given to JSPL
   - ‘Green Tech Awards’ for ‘Training Excellence & Best HR Leader’ given to JSPL in June 2014

   Barbil

   - ‘International Safety Award’ given by the British Safety Council, UK to JSPL
   - ‘Global Environment Platinum Award 2014’ for ‘Outstanding Achievement in Reducing Pollution and Environment Management, given to JSPL
   - ‘NSCI Safety Award’ given to JSPL in 2014
   - ‘ABP News HR & Leadership Award’ in the category ‘HR Leader for Innovation’ given to JSPL
   - ‘Global Training & Development Leadership Award’, in the category, ‘Best Results Based Training’, given by the World HRD Congress to JSPL in 2015

   Jindal Steel and Power | 119
Way Forward

Dear Stakeholders,

FY 2014-15 was JSPL’s first year of incorporating business sustainability as a core aspect of its operations. The department was established, the team was put in place, and priorities were defined. Following which, the rest of the year there were substantial and crucial steps taken towards ensuring the company’s business longevity.

As discussed in this Business Sustainability report, some of these steps were: establishing a Risk and Compliance Management team, establishing an Energy Management team, constituting 5 company policies for Risk Management, Human Rights Protection, Policy Advocacy, Stakeholder Mapping and Engagement, Product Life cycle Sustainability, ensuring the company’s business model sustainability (with emphasis on establishing a raw material procurement plan, structured business processes, ways to increase sales orders), as well institute JSPL’s core identity and building the company’s brand around that via collaborating with various departments internally in the company at all times.

Also JSPL’s CSR activities were thoroughly internally reviewed by repeated site visits, the lives impacted per CSR project were mapped, and accordingly CSR projects were focused on to 3 themes of education; health, nutrition, and population stabilization; and infrastructure.

There was emphasis on JSPL’s social commitment of ‘clean and green country’ to be embedded in all aspects of its business. In this context, the use of new technologies for more environment friendly manufacturing processes were encouraged, and existing such technologies were showcased at important international forums such as the United Nations, World Economic Forum, World Steel association. There were also important strides taken in ensuring safety for all employees at JSPL. One of the highlights of FY2014-15 was that JSPL became the only company in India to have a 60 metre Turntable Ladder, a fire fighting machine for fighting the fire at high rise structures and buildings. The machine can throw water and foam jet up to 85 meter height to fight any fire emergency. This Turntable Ladder was imported from Australia and installed at JSPL’s plant in Angul. Accident frequency rate was reduced by 18.59% and fatality rate was reduced by 34.32%.

In this way there has been considerable work done, especially given that the initial months of FY 2014-15 were used for establishing what business sustainability meant at JSPL, organizing the business sustainability team, and its priorities.

The next year promises to provide larger opportunities for JSPL to continue to move on the path of speedy, holistic, and authentic growth. The priorities for JSPL’s business sustainability in FY 2015-16 is as follows:

- Procuring raw material at economic costs
- Improving productivity of capital and employees
- Establishing JSPL’s Research & Development centre
- Ensuring the smooth functioning and success of the 2 new teams created - Risk & Compliance Management team; Energy Management team
- Building greater synergies between JSPL’s domestic and international operations sites
- Establishing and implementing a detailed stakeholder management plan at JSPL
- Taking strides in further strengthening JSPL’s brand identity

Further, JSPL is excited about the completion of construction of a state-of-the art school for 900 students in the most disastrous struck area of Nepal. This site in the Lalitpur region was previously occupied the Patan Higher Secondary School, that was one of the most important heritage schools in Nepal but had developed cracks in the building due to the earthquake earlier this year. The design of the new school has been prepared by JSPL’s architecture department and has been approved by the Government of Nepal. JSPL is the only private company building a school in post-earthquake Nepal.

Another initiative that the company is enthusiastic about is the completion of construction of JSPL community toilets in villages. JSPL’s community toilets have been carefully designed by JSPL’s architecture department to provide the best sanitation and aesthetics in rural India. Why should the quality of toilets in rural India differ from urban India?

Also, the Chairman’s vision of stabilizing India’s population was one of the most important heritage schools in Nepal but had previously occupied the Patan Higher Secondary School, that was previously occupied the Patan Higher Secondary School. Also JSPL’s architecture department and has been approved by the Government of Nepal. JSPL is the only private company building a school in post-earthquake Nepal.

Another initiative that the company is enthusiastic about is the completion of construction of JSPL community toilets in villages. JSPL’s community toilets have been carefully designed by JSPL’s architecture department to provide the best sanitation and aesthetics in rural India. Why should the quality of toilets in rural India differ from urban India?

Also, the Chairman’s vision of stabilizing India’s population was one of the most important heritage schools in Nepal but had previously occupied the Patan Higher Secondary School. Also, JSPL’s architecture department and has been approved by the Government of Nepal. JSPL is the only private company building a school in post-earthquake Nepal.

Another initiative that the company is enthusiastic about is the completion of construction of JSPL community toilets in villages. JSPL’s community toilets have been carefully designed by JSPL’s architecture department to provide the best sanitation and aesthetics in rural India. Why should the quality of toilets in rural India differ from urban India?

Also, the Chairman’s vision of stabilizing India’s population was one of the most important heritage schools in Nepal but had previously occupied the Patan Higher Secondary School. Also, JSPL’s architecture department and has been approved by the Government of Nepal. JSPL is the only private company building a school in post-earthquake Nepal.

Another initiative that the company is enthusiastic about is the completion of construction of JSPL community toilets in villages. JSPL’s community toilets have been carefully designed by JSPL’s architecture department to provide the best sanitation and aesthetics in rural India. Why should the quality of toilets in rural India differ from urban India?
India’s villages be any less than the toilets in the metropolises of the world? The unique model of JSPL’s community toilets ensures that the local community is engaged in every part of the construction process of the community toilets. Also cleanliness of each toilet is maintained by women in the village. These women are part of the Village Mahila Samooh, and have self-organized themselves to take responsibility of keeping the community toilets clean daily.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s community toilets ensure that the local community is engaged in every part of the construction process of the community toilets. Also cleanliness of each toilet is maintained by women in the village. These women are part of the Village Mahila Samooh, and have self-organized themselves to take responsibility of keeping the community toilets clean daily.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

In the next year, JSPL is also looking forward to scaling up the Chairman’s initiative for stabilizing India’s population. In FY 2014-15 JSPL facilitated the sale of steel at a zero-profit basis from JSW to Hindustan Latex Family Planning and Protection Trust. JSPL also designed sleek vending machines made of this steel, and partnered with HLFPPT to bring female condoms at a very subsidized cost in India. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.

To ensure the well-being of all stakeholders, JSPL will continue to focus on procuring raw material at the most economic costs possible with a renewed emphasis on more cost-efficient production processes. JSPL is also excited about the establishment of a dedicated Research & Development centre during FY 2015-16 which will also focus on innovations towards energy and cost efficient steel making. The next year will further see the implementation of various strategies to increase productivity of capital and employees at JSPL. The company’s greatest asset is its talented human capital and the next year will see initiatives across the company for multi-skilling each JSPL employee.

Miniya
Chief Sustainability Officer

There is an ongoing effort to strengthen data collection and data management at JSPL. This effort will continue as a priority through the next year. JSPL is thrilled to be closely engaged with World Steel Association on providing disclosures to all aspects of business sustainability of the company. JSPL’s Chief Sustainability Officer is a member of the Sustainability Experts Group at the World Steel Association.
Assurance Statement

EY has been engaged by Jindal Steel & Power Limited (the “Company”) to provide an assurance on the report referred to in “Scope of assurance” section.

EY confirms that the report has been prepared in strict compliance with the GRI standards and that it has met the assurance criteria as mentioned in “Notes:” section.

EY has also provided an assurance on the Company’s performance indicators as mentioned in the report.

For more information, please refer to the full report available on the Company’s official website.
JSPL’s Chairman Mr. Naveen Jindal won for all Indians the right to hoist the Indian National Flag. He moved the Delhi High Court with a writ petition under Article 226 of the Constitution, and eventually won the legal battle for the Nation. In 2002 the Union Cabinet announced that citizens will be free to fly the National Flag respectfully on all days from January 26, 2002. Mr Naveen Jindal thereafter established the Flag Foundation of India that places India’s National Flag in public spaces.

Monumental Indian National Flag hoisted by Flag Foundation of India at Central Park, Connaught Place, New Delhi