

# CREATING SUSTAINABLE VALUE



**Business Responsibility Report  
2016-17**



**JINDAL SAW LTD.**  
TOTAL PIPE SOLUTIONS

## Contents

From Group CEO & Whole-time Director's Desk	2
Message of Business Responsibility Leader	3
2016-17 Highlights	4
Our Business Responsibility Journey	5
Business Responsibility Report	6
- Section A: General Information	6
- Section B: Financial Details of the Company	6
- Section C: Other Details	7
- Section D: BR Information	7
- Section E: NVG Principles	10
PRINCIPLE 1: BUSINESS ETHICS TRANSPARENCY & ACCOUNTABILITY	10
PRINCIPLE 2: PRODUCT RESPONSIBILITY	10
PRINCIPLE 3: EMPLOYEE WELL-BEING	12
PRINCIPLE 4: STAKEHOLDER ENGAGEMENT	13
PRINCIPLE 5: HUMAN RIGHTS	14
PRINCIPLE 6: ENVIRONMENT	14
PRINCIPLE 7: ADVOCACY AND PUBLIC POLICY	21
PRINCIPLE 8: INCLUSIVE GROWTH AND EQUITABLE DEVELOPMENT	21
PRINCIPLE 9: CUSTOMER ENGAGEMENT	24
The Road Ahead	24
List of Abbreviations	25

Acknowledgement:  
Jindal Saw Limited acknowledges support provided by  
Thinkthrough Consulting Pvt Ltd. in compilation of this Report



Neeraj Kumar

From Group Chief Executive Officer & Whole-time Director's Desk



Dear Stakeholders,

It is my pleasure to present the Business Responsibility Report of Jindal Saw Limited (JSAW) to you all. This is the first year that we have entered into the 'top 500 companies list by market capitalization' and are therefore, publishing this report as per SEBI's Listing Obligations and Disclosure Requirements under Regulation 34(2)(f).

Since its inception, JSAW is committed to having a positive impact on the lives of people who come in contact with our operations. In our efforts to create sustainable growth, we lay special emphasis on human value and consider our employees as our biggest assets; their safety and well-being is our primary responsibility.

We are committed to good governance practices and maintain transparency and ethics in our operations. Since its inception, JSAW has been conscious about running its operations in a responsible manner and we have consistently upheld these standards.

Our customers are at the centre of everything we do and our unstinted commitment to product quality ensures that their operations run safely and smoothly with no disruptions on account of our products, their quality and ease of usage.

All our operations are sensitive to environmental concerns and some of the case studies in this document bear testimony to the rigour with which we pursue initiatives to conserve the environment.

As we move forward, our commitment to conserving resources, creating innovative products and solutions and implementing projects that will benefit the business, environment and society will only continue to grow. As an organization, we have created a positive impact on the lives of numerous people who live around our manufacturing facilities through various social development projects as well as for people with reduced mobility across the country.

I look forward to sharing with you the various policies and practices that we have adopted as a Company to ensure the interests of all stakeholders are protected and preserved.

Thanking You  
**Neeraj Kumar**  
Group Chief Executive Officer & Whole-time Director



Dear Stakeholders,

In this first Business Responsibility Report of Jindal Saw Limited, we are happy to share information about the Company that relates to the levels of transparency, accountability and responsibility we exert in conducting our business.

As we embark upon our Sustainability Reporting journey we have realized that sustainable value creation is present in the DNA of the Company and even though we may just be at the beginning, we have created immense value beyond the balance sheet, already.

Disclosure through reporting provides investors holistic information about the Company they have invested in or are planning to invest in so that they have a better view about their strategy and plans. This helps businesses make informed decisions and manage key risks to build investor and stakeholder confidence and improve future performance. While we have followed the guidelines of SEBI to compile this report, we have also committed to be transparent in disclosure and provided information that helps our stakeholders understand our initiatives on sustainability.

It is with this sentiment that we look forward to furthering our initiatives on reporting in the next few years so that we can provide our stakeholders more information about how we run our business with a long term vision and strategy, and how we create business value across capitals; thereby creating a company that they can rely on for years to come.

I look forward to coming back to you next year with an even more informative BR Report.

Yours sincerely,  
**Sunil K Jain**  
Company Secretary



Sunil K Jain

Message of Business Responsibility Leader

## 2016-17 Highlights

**3 women Directors on Board.**

**50% of the Directors on the Board are Independent.**

**42 employees with 40% disability and above.**

**Recycling of total sewage of Bhilwara city has resulted in recovery of 1,129 thousand cubic metre water that is used to meet the requirements of the Bhilwara Plant operations.**

**Manufacturing Pellets from low-grade iron ore through magnetite process helps in conserving high quality iron ore. For every ton of Pellets manufactured, 1,000 kg of low-grade iron ore is utilised.**

**Various energy saving initiatives have resulted in saving approximately 1,440 kl of diesel, 696 tons of LPG and 25 lac units of electricity per annum.**



## Our Business Responsibility Journey

Jindal Saw Limited (JSAW) is a part of the \$15 billion O P Jindal Group. Founded in 1984 by Shri P.R Jindal, JSAW continues to be guided by the Founder's Vision of building a robust business, based on sound human values. It is these values that have become even more relevant today, when Indian businesses are being mandated to move towards a regime of higher levels of transparency and reporting; not just with regard to financial information but also across all facets of business, covering economic, social and environmental dimensions. Business Responsibility Reporting is one of the significant steps in our sustainability journey. Spurred by this legacy, we have grown from strength to strength and today are a \$1 billion conglomerate with manufacturing facilities across India, USA, Europe and Middle East.

JSAW is committed to 'Sustainable Value Creation' right from the time that it set up India's first manufacturing facility to manufacture LSAW Pipes in Kosi Kalan, Uttar Pradesh, India. Be it environment consciousness, societal responsibility, employee well-being, customer first or its commitment to quality and innovation; these have been the drivers that have given momentum to our rapid growth. While growing from a single plant, single-product company to a multi-plant, multi-industry conglomerate, JSAW has continuously been conscious of ensuring that the growth does not erode the environment, while also building societal well-being. Some of the case studies elucidated in this report are testimony to the Company's commitment to sustainability.

Reporting environment on sustainability is evolving rapidly in India and Integrated Reporting (IR) is fast catching up. Increasingly, investors want to know more than just what the balance sheet tells them about the company they have invested in, or just the past information about environmental and social performance, thus placing emphasis on an integrated thinking about business. IR is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium

and long term. It helps businesses to promote a holistic approach about their strategy and plans around the 6 Capitals namely, Financial, Manufactured, Intellectual, Human, Social & Relationship, and Natural; enabling them to make informed decisions and manage key risks to build investor and stakeholder confidence and improve future performance.

Over the past three decades, we have taken definitive steps to build value across various capitals:

- Built a \$ 1 billion conglomerate with strong credit profile and high Basel II ratings under Financial Capital;



- Diversified its product and business portfolio from single product, single location company to its present state under **Manufactured Capital**;
- Created innovative products and solutions under **Intellectual Capital**;
- Invested in employee wellbeing and development under **Human Capital**;
- Created enablers for people with reduced mobility in the country as well as for local communities under **Social and Relationship Capital**;
- Implemented numerous initiatives across all locations under **Natural Capital** like sewage treatment of entire sewage of Bhilwara, raw material conservation through magnetite iron ore production, heat

recovery plant, extensive green belt development, housing & medical centres around manufacturing facilities, and various other initiatives.

We aspire to engage even further with our investors, customers, employees, partners, Government, contractors and suppliers to lead the way in building a sustainable eco-system where every action taken on behalf of JSAW is a testimony of responsibility and commitment towards People, Planet and Profit, without compromising one for the other. Our commitment is to continue building on the value created in every region that we have presence in, so as to help bring India closer to achieving its commitments against the 2030 agenda for achieving the Sustainable Development Goals (SDGs).

We are already surging ahead on the road to sustainable development and

our initiatives are not limited to just building profitability of the balance sheet, but also creating value for each of our constituents. We will continue sharing disclosures with regard to our sustainability initiatives and are committed to maximising the returns for all stakeholders so that we can help build a better and more certain tomorrow, and thereby do our bit in helping create the India of our dreams!

# Business Responsibility Report

## Section A: General Information

- A-1 Corporate Identity Number (CIN) of the Company : L27104UP1984PLC023979
- A-2 Name of the Company : Jindal SAW Limited
- A-3 Registered address : A-1, UPSIDC Industrial Area, Nandgaon Road, Kosi Kalan, Mathura - 281403
- A-4 Website : www.jindalsaw.com
- A-5 E-mail id : investors@jindalsaw.com
- A-6 Financial Year reported : 2016-17
- A-7 Sector(s) that the Company is engaged in (industrial activity code-wise):

Name and Description of main products/services	NIC Code of the Product/service	% Of total turnover of the company
Manufacture of tube and tube fittings of basic iron and steel	24106	84.93%
Mining of Iron ore, beneficiation and pellet production	07100	13.29%

- A-8 List three key products/services that the Company manufactures/provides (as in balance sheet) : Saw Pipes (LSAW/HSAW)  
DI Pipes and fittings  
Seamless Pipes  
Pellets  
Others
- A-9 Total number of locations where business activity is undertaken by the Company:
- i. Number of International Locations (Provide details of major 5) (all units can be listed if so desired) : Abu Dhabi, UAE  
Sertubi, Italy  
Baytown, Texas, USA  
Bay St. Louis, MS, USA  
Minneapolis, Minnesota, USA
- ii. Number of National Locations : Bellary, Karnataka  
Bhilwara, Rajasthan  
Kosi Kalan, Uttar Pradesh  
Nasik, Maharashtra  
Nanakapaya & Samaghogha, Mundra Gujarat
- A-10 Markets served by the Company : Local/State/National/International : Pan India & Global

## Section B: Financial Details of the Company

- B-1 Paid up Capital (INR) : 6395.19 Lakh
- B-2 Total Turnover (INR) : 593296.40 Lakh
- B-3 Total profit after taxes (INR) : 30068.20 Lakh
- B-4 Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax(%) : 2.26%
- B-5 List of activities in which expenditure in 4 above has been incurred : Refer to Annexure 1 of the Annual Report on Page #25

## Section C: Other Details

- C-1 Does the Company have any Subsidiary Company/ Companies? : Yes the company has 25 subsidiary companies
- C-2 Do the Subsidiary Company/ Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s) : Subsidiary companies located in India are covered by the policies of JSAW and the ones located overseas are covered by some of JSAW's policies like that on employee well-being and responsibility but for environment, product responsibility etc. align themselves to the applicable law of the land.
- C-3 Do any other entity/entities (e.g. suppliers, distributors, etc.) that the Company does business with; participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%] : The Company is in the process of extending its business responsibility to its suppliers and distributors, agents etc.

## Section D: BR Information

- D-1 Details of Director/Directors responsible for BR
- a. Details of the Director/Directors responsible for implementation of the BR policy/policies
- DIN No. : 01776688
- Name : Shri Neeraj Kumar
- Designation : Group CEO and Whole-time Director
- b. Details of the BR head
- DIN No. : NA
- Name : Shri Sunil K. Jain
- Designation : Company Secretary
- Telephone No. : +91-11-4146 2220
- Email id : sunil.jain@jindalsaw.com



**D-2 Principle-wise (as per NVGs) BR Policy/policies (Reply in Y/N)**

S.No.		P1	P2	P3	P4	P5	P6	P7	P8	P9
1.	Do you have a policy/policies for....	Y	Y	Y	Y	Y	Y	Y	Y	Y
2.	Has the policy being formulated in consultation with the relevant stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.	Does the policy conform to any national/ international standards? If yes, specify. (50 words)	Policies have been formulated taking into account the industry and environment company operates in and have been benchmarked against those of leading Indian corporates								
4.	Has the policy being approved by the Board? If yes, has it been signed by MD/ owner/CEO/appropriate Board Director?	Y	Y	Y	Y	Y	Y	Y	Y	Y
5.	Does the company have a specified committee of the Board/Director/Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	Y	Y	Y
6.	Indicate the link for the policy to be viewed online.	P1: <a href="http://www.jindalsaw.com/pdf/Policy-Code-of-Conduct.pdf">http://www.jindalsaw.com/pdf/Policy-Code-of-Conduct.pdf</a> P2: IMS policy is on intranet displayed at all sites P3: HR policy is available online on the intranet P4: <a href="http://www.jindalsaw.com/policies.php">http://www.jindalsaw.com/policies.php</a> P5: Human Rights forms a part of HR policies P6: <a href="http://www.jindalsaw.com/pdf/ehs-policy.pdf">http://www.jindalsaw.com/pdf/ehs-policy.pdf</a> P7: Is part of the HR Policy P8: <a href="http://www.jindalsaw.com/pdf/Jindal-SAW-CSR-Policy.pdf">http://www.jindalsaw.com/pdf/Jindal-SAW-CSR-Policy.pdf</a> P9: Customer responsibility is covered under the Company's Quality Policy								
7.	Has the policy been formally communicated to all relevant internal and external stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
8.	Does the company have in-house structure to implement the policy/policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
9.	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
10.	Has the company carried out independent audit/evaluation of the working of this policy by an internal or external agency	Y	Y	Y	Y	Y	Y	Y	Y	Y

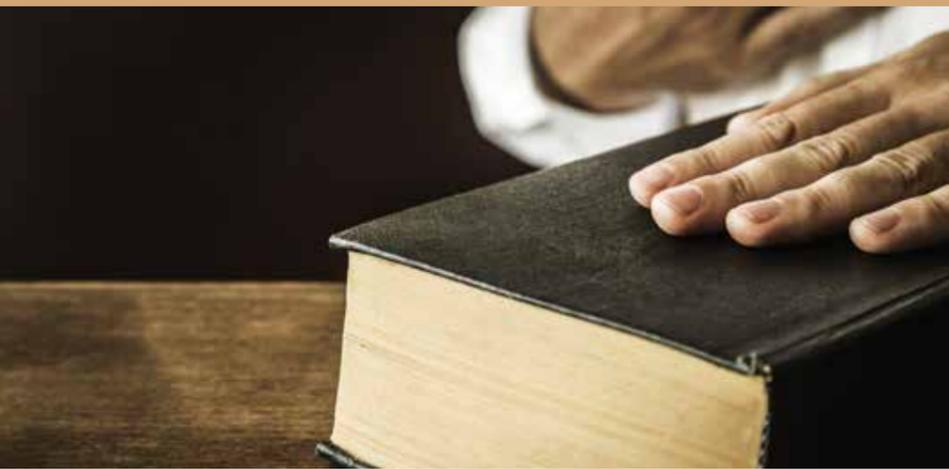
**D-2a If the answer to S.No. D-1 against any principle, is 'No', please explain why: (Tick up to 2 options) NOT APPLICABLE**

S.No.	Questions	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9
i.	The company has not understood the Principles									
ii.	The company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles									
iii.	The company does not have financial or manpower resources available for the task									
iv.	It is planned to be done within next 6 months									
v.	It is planned to be done within the next 1 year									
vi.	Any other reason (please specify)									

**D-3 Governance related to BR**

Indicate the frequency with which the Board of Directors, Committee of the Board or CEO to assess the BR performance of the Company. Within 3 months, 3-6 months, Annually, More than 1 year.	This is the first year that the Company has published a BR Report. The efficacy of governance process will be reviewed once in 3-6 months.
Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?	The Company has not yet published a sustainability report, however, it intends to expand reporting over the coming years.





## Section E: NVG Principles

### Principle 1: Business Ethics Transparency & Accountability

*"We are committed to maintaining high levels of ethics and accountability throughout our operations while providing maximum stakeholder value. It is our responsibility to ensure that the organization is managed in a manner that protects and furthers the interest of our stakeholders."*

JSAW is committed to ensuring integrity and transparency in all its business operations. In order to implement this, we have devised a Code of Ethics/ Conduct for all employees, Senior management and Directors. The Code of Ethics covers the Company, its subsidiaries and Group Companies.

The Code of Ethics at JSAW also covers more than 50% of its contractors and suppliers through the terms of the contractual agreement they sign with the Company. We are currently in the process of extending the coverage of the Ethics Policy across its supply chain to cover all contractors and suppliers, NGOs consultants, etc.

We have also developed mechanisms to capture issues, concerns and complaints under our 'Whistle Blower Policy'; however, no complaints have been received on ethical misconduct.

### Principle 2: Product Responsibility

*"While designing our products, significant importance is given to health and safety during manufacturing as well as the usage phase. Information is displayed on the products strictly as per the industry labelling norms for marketing."*

We are a responsible organisation and are conscious of our environmental footprint. There are numerous initiatives being undertaken at each plant to minimize any adverse impacts of its products during the process of manufacturing, transportation and usage. Some of the more significant ones are:

- JSAW is the only Indian pipe manufacturer in India that has implemented the Double Chamber pipe, a unique design innovation in manufacturing that ensures high strength and durability and minimises the use of building material and construction activity at the customers' end. Customers can just lay the pipe without having to create Thrust Blocks at bends and curves to protect the pipe. This saves high construction costs and conserves land from contamination due to construction activity.

*Does the policy relating to ethics, bribery and corruption cover only the Company?*

*Does it extend to the Group/Joint Ventures/Suppliers/Contractors /NGOs/Others?*

*How many stakeholder complaints have been received in the past five years and what percentage were satisfactorily resolved by the management? If so, provide details thereof, in about 50 words or so.*

*List up to 3 of your products or services whose design has incorporated social or environmental concerns, risks and/or opportunities*

- The lining and coating material used in JSAW DI pipes has been certified as per the UK Standard WRAS. The Water Regulations Advisory Scheme (WRAS) is a conformance mark that demonstrates that an item complies with high standards set out by water regulations promulgated in 1999 in the United Kingdom. This standardised material is used for coating of all DI Pipes manufactured by JSAW, which ensures that water flowing through these pipes does not get contaminated on account of the inner lining of the pipes.
- DI Pipes have as much as 98 percent recycled content, and can also be recycled further.
- The performance of Iron pipes and fittings is, by design, environmentally responsible, as the larger inside diameter of ductile iron pipes, for a given flow, uses less energy to pump fluids in comparison to pipes made of other materials.
- Ductile iron pipes have a minimum anticipated service life of 100 years owing to its wall thickness and corrosion control properties.
- Ductile iron pipes are impermeable to organic contaminants and are therefore able to protect clean water from underground spills.

We source most of our iron ore from a mine in Bhilwara to produce Iron pellets. This mine produces low quality iron ore. In order to conserve the mineral, we have devised a process to create pellets from Magnetite ore concentrate. This has resulted in creating high quality pellets without depleting reserves of high quality iron ore and in the process also conserving energy.

Bulk of our raw material is sourced from mines and large companies owing to the nature of the product. However, wherever possible, the company selects local vendors and develops them to be a part of its supply chain. The company has made concerted efforts in developing local vendors, for instance:

#### Vendor Development for Gaskets

Earlier (till 5-6 years ago), Gaskets were purchased mainly from two large vendors based in Hyderabad and Mumbai respectively. We took a proactive initiative of identifying a smaller, but capable vendor and gradually developed them over the past few years. This not only resulted in significant cost savings for the Company but also developed capacity and capability of the vendor from having a turnover of INR 2-3 Crore to more than INR 25 Crore turnover as on date.

#### Operation & Maintenance Contracts (O&M) at Bhilwara

JSAW has developed small local contractors to take on complex Operation & Maintenance contracts at Bhilwara. These contractors were earlier only labour suppliers, we developed their capacities and capabilities to undertake high value jobs that involve handling of manpower of various categories (Skilled/Semi Skilled/Unskilled) deployed along with machineries to run day-to-day operation & maintenance of various sections of Plant under guidance of our engineers. They have proven to be much more economical as compared to large contractors, and are growing with the company.

The most significant among these, is a vendor who was a small time labour supplier when the Bhilwara Project started in 2010-2011 and employed just 30-40 labourers at that time. Today, he employs 200 workers only for JSAW and his turnover has grown from INR 40-50 Lakhs/Annum to INR 2 Crores (only from JSAW). He has been able to grow his business further as well as provide employment to many people in the vicinity.

The Company exercises similar responsibility when it comes to waste management. In mining and mineral beneficiation, used oil is the only waste generated from the process. This is drained from machines/equipment and is reused for lubrication in chains, stacker and conveyor used for raw transportation of materials. Remaining quantity of used oil is sent to an authorized recycler to recycle it in a responsible manner.

Some of the empty/contaminated drums are reused for storing used oil being generated from plant equipment and the balance quantity of drums is sent to a registered recycler for recycling in a responsible manner.

*Does the company have procedures in place for sustainable sourcing? If yes, what % of your inputs was sourced sustainably? Also, provide details.*

*Has the company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve their capacity and capability of local and small vendors?*

*Does the company have a mechanism to recycle products and waste? If yes, what is the percentage of recycling of products and waste (separately as <5%, 5-10%, >10%)? Also, provide details thereof, in about 50 words or so.*



**Principle 3: Employee Well-being**

*“Our people are critical for our company’s growth and success, and we remain committed to the creation and retention of best-in-class workforce. Employee well-being, health and safety, learning and development, human rights are some of the key tenets of our human resource practices. We have adopted policies and instituted several initiatives to this end.”*

Employees are our greatest assets and ensuring their well-being is of paramount concern to us. We continuously evaluate our HR policies to remain competitive with the industry. Here is a break up of our total manpower:

- Total number of employees employed by JSAW are 13,350
- Total number of temporary/contractual/casual employees are 6,099
- Total number of women employees are 32
- Total number of employees with over 40% disabilities are 42

*There is no Union/Employee Association at JSAW.*

The Company is extremely conscious of any violation on account of labour laws. We do not tolerate child or forced labour, and have also instituted a ‘Sexual Harassment Policy’ that is communicated across the Company. There have been no complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year.

**Principle 4: Stakeholder Engagement**

*“We take into consideration the actual or potential impacts that our businesses have on all our stakeholders, and vice versa. We continually engage with all our stakeholder groups on an on-going basis. While achieving our growth targets, we ensure inherent risks are reduced and value for stakeholders across the spectrum are maximised without compromising on values of good corporate citizenship.”*

JSAW’s stakeholders include investors, employees, customers, vendors and suppliers and the community; each one of them being of critical importance.

JSAW’s stakeholders include investors, employees, customers, vendors and suppliers and the community; each one of them being of critical importance. We reach out to all stakeholders to make appropriate disclosures at regular intervals and take necessary steps for expeditious remedy of any of their grievances. We have formulated a stakeholders relationship committee to specifically look into any complaint of shareholders/ investors and deal with all issues relating to investors’ grievance, including transfer of shares, non-receipt of dividends, issue of duplicate shares etc. Various forums in the organisation including an employee satisfaction survey addresses issues of various sections of employees. Customers too have redressal mechanisms by which they can approach the Company to register complaints about product issues. In addition, we also conduct a Customer satisfaction survey on a half yearly basis. The Company also interacts regularly with vendors/ suppliers.

JSAW has been focusing specifically on people with reduced mobility as the section of disadvantaged, vulnerable and marginalised stakeholders. We have made concerted efforts to influence policy, create enablers and facilitate better mobility options for this section of society that includes people with disability, senior citizens, expectant women and women with babies. We also work for development of marginalised communities in the vicinity of its manufacturing facilities.

JSAW has various programmes under ‘Svayam’ a think-tank set up under the Sminu Jindal Charitable Trust to implement its CSR initiatives. These include helping shape policy for people with reduced mobility in order to provide them with enabling infrastructure that allows them to move and live with dignity; thereby allowing them a level playing field. These initiatives range from retrofitting of vehicles to make them friendly for people with varied mobility needs to training teachers to handle children with special needs to influencing policy for infrastructure development.

*Has the company mapped its internal and external stakeholders?  
Yes/No*

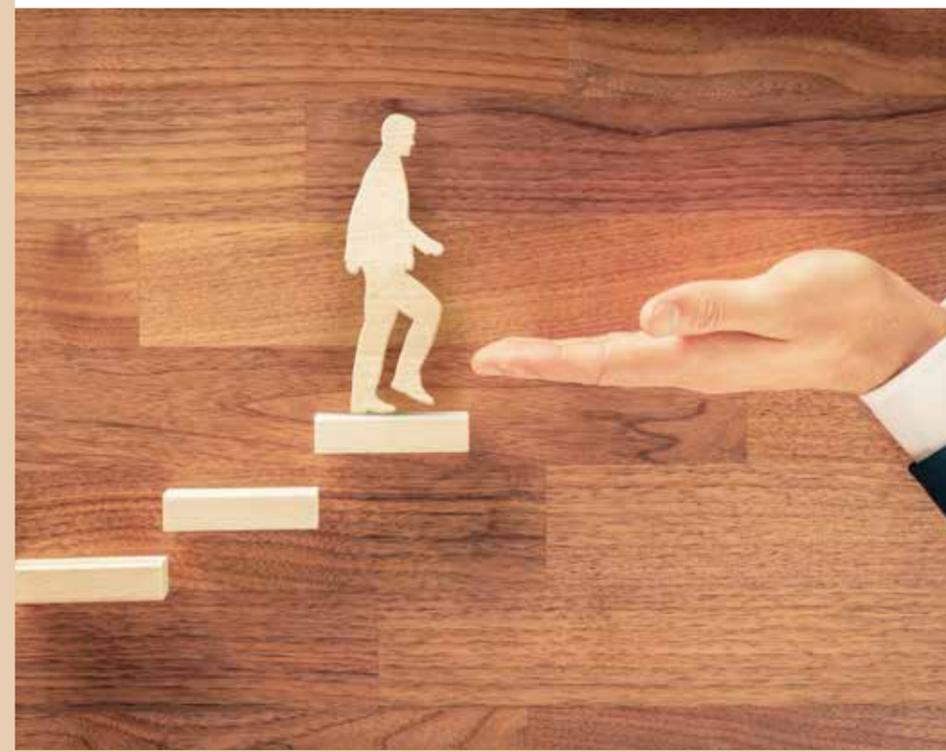
*Out of the above, has the company identified the disadvantaged, vulnerable & marginalized stakeholders?*

*Are there any special initiatives taken by the company to engage with the disadvantaged, vulnerable and marginalized stakeholders. If so, provide details thereof, in about 50 words or so.*

*Do you have an employee association that is recognized by management?*

*What percentage of your permanent employees is members of this recognized employee association?*

*Please indicate the Number of complaints relating to child labour, forced labour, involuntary labour, and sexual harassment in the last financial year and pending, as on the end of the financial year.*





## Principle 5: Human Rights

*“Responsibility towards our workforce in terms of human rights considerations is of utmost importance to us. We remain committed to upholding all facets of human rights and all our operations meet the appropriate human rights criteria as applicable by the law. We have adopted a Policy on Prevention & Redressal of Sexual Harassment, in line with the statutory requirements and all our new hires are made aware about the company’s policy on Human Rights and Prevention of Sexual Harassment.”*

Apart from India, JSAW operates in USA, Italy and UAE, each of these countries have different reporting requirements for issues like human rights and each of our subsidiaries aligns themselves to the respective requirements. For Indian operations, our human rights mandate extends across all subsidiaries and also covers approximately 50% of its suppliers and contractors through various clauses listed in the contractor/ supplier agreements. The company is in the Process of extending this across its entire supply chain. Contractors and suppliers are required to submit signed copies of following documents before commencement of work at site:

- Applicable Workmen’s Compensation Insurance (WCI) policy (taken from any general insurance company), of adequate value commensurate with risk involved in the job;
- License for Labour Laws (as per Labour Contract Act of State/Central Govt., as applicable) and compliance under this Act;
- Statutory compliance under Provident Fund (PF) Act and ESI if and as applicable;
- Statutory compliance under Minimum wages Act (State/Central Govt. as applicable);
- Statutory compliance under Payment of Wages Act;
- Child Labour is strictly prohibited under Labour laws & the contractor undertakes not employ any child labour.

There have not been any stakeholder complaints regarding any of the above.

## Principle 6: Environment

*“On the environment front, besides meeting all the statutory norms, we are continuously working to develop enhanced technologies and innovative solutions that improve efficiencies and optimise use of natural resources.”*

JSAW has an Environment, Health and Safety Policy that covers JSAW and all its subsidiaries and joint ventures firms as well as suppliers and contractors. We have invested heavily in reducing its environmental footprint across all our plants as well as in innovations that mitigate the effects of environmental impact in the following areas:

### Air Pollution Control:

To mitigate fugitive dust emissions, water is sprayed on ore stacks before handling the same at the mine. 10-12 tankers of various capacities ranging from 12 kl to 22 kl are used for this purpose.

In the Crusher Unit, closed conveyor belt, dry fog system and continuous water sprinkling systems have been installed to control the fugitive dust emissions. The operations and maintenance team carry out routine maintenance of water spray nozzles.

*Does the policy of the company on human rights cover only the company or extend to the Group/Joint Ventures/Suppliers /Contractors/NGOs/Others?*

*How many stakeholder complaints have been received in the past financial year and what per cent were satisfactorily resolved by the management?*

*Does the policy related to Principle 6 cover only the company or extends to the Group/Joint Ventures/Suppliers/Contractors/NGOs/etc. Does the company have strategies/initiatives to address global environmental issues such as climate change, global warming, etc.? Y/N. If yes, please give hyperlink for webpage etc.*

The beneficiation plant is based on a wet process; raw material, i.e., crushed magnetite iron ore, is transferred through a closed conveyor belt from Crusher Unit to beneficiation plant hoppers. Mist water sprinkling system has been installed to control fugitive dust emissions in raw material hoppers in the beneficiation plant.

Iron ore concentrate is received through the conveyor in wet form; hence there is no fugitive dust generation during transportation. An electrostatic precipitator (ESP) is used to control the emissions of particulate matter from the kiln. The wind box exhaust fan located between the ESP and the stack collects hot air passing through the down draught drying zone. Clean air is exhausted to the atmosphere by a 120 m tall stack. To stabilize the temperature of this air for optimum green pellet drying, ambient air is sucked in ahead of the up-draught drying fan through a bleed-in and forced through the bed after which it is cleaned in an ESP, collected by the hood exhaust fan and discharged into the atmosphere through the stack. The production process generates some dust, appropriate sealing, sucking and de-dusting measures (Bag Filters) are installed to control it.

### Water Pollution Control:

**Industrial:** There is no discharge of effluents from the mining lease area and Beneficiation Plant. Water contained in tailing and concentrate is recovered with the help of thickener and advanced filter press technology and is reused in ‘Mineral Beneficiations’ process.

In the ‘Iron Ore Pellet Plant’, water (9% moisture) is required for mixing of raw materials and making green balls. The entire water gets evaporated. No wastewater is discharged from the pellet plant.

**Domestic:** In the plant area, we have installed compact STPs for the treatment of domestic wastewater generating from office urinals, toilets and hostel. The compact STP is based on GEO Green Bio filters Bed (GBF) technology. Treated water of the STP plant is being completely utilized for watering purpose in plantation area.

### Noise Pollution Control:

Noise levels are controlled in mine lease boundary and beneficiation plant area through controlled blasting as approved by DGMS and Directorate of Explosives. Noise levels within the plant boundary are within the standards of 75 dB (A) during daytime and 70 dB (A) during night time. Adequate PPEs are provided to workmen to maintain a safe working environment.

In order to control noise of fan in the pellet plant, vibration-damping cushion, shock absorber and silencer is applied in order to reduce noise. The layout of the plant and greenbelt also helps in achieving reduced ambient noise levels.

### Solid Waste Management:

**Mine:** The overburden generated from the mine consists of Calcium Silicate, Calc-schist and Calc-Gneiss. It is stacked at earmarked places as per conditions

given in the mining plan. Some of the overburden generated from the mine has been utilized for making roads and levelling of other depressed ground within the lease area, as required. The dust collected from the ESP & multi-cyclone of pellet plant and pellet fines is recycled back for making pellets. There is no disposal of solid waste from the pellet plant.

**Tailing from Beneficiation Unit:** The advanced filter press through thickener recovers tailing generated from beneficiation plant. Tailing cake in dry form is stacked in a earmarked place and some part has been recycled to recover Fe and other minerals like quartzite, Calc Silicates, Hematite, Magnetite, Goethite and Limonite.

### Hazardous Waste Management:

During mining and mineral beneficiation, no hazardous waste is generated except used oil, which is drained from machineries and equipment. This is further used for lubrication in chains, stacker and conveyor for raw materials transportation. The balance quantity is sent to an authorized recycler.

Empty /Contaminated Drums are reused to store used oil being generated from plant equipment and balance quantity is sent to an authorized recycler.



**Green Belt development:**

We are committed to ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agro-forestry, conservation of natural resources and maintaining quality of air, water and soil. JSAW provides full support and sponsors maintenance of all parks and drainage cleaning, etc., to the Municipal Council in Bhilwara.

Green belt development and plantation is given utmost importance. For conservation of environment, the Company has carried out plantation of more than 75,000 trees of various species within and outside the premises.

We have implemented ISO14001 and OHSAS18001 environmental and safety management standards at most of its sites and therefore we identify and assess potential environmental as well as health & safety risks. The Risk Register and other related documentation as per the requirements of the standard are maintained and routinely updated.

JSAW has installed a 30 MW waste heat Recovery plant under Clean Development Mechanism (CDM) under which it utilizes waste heat from coke oven plant. The project is functional as an energy conservation initiative but the carbon credits are no longer claimed under CDM. Building further on its commitment to minimize wastage and utilize resources to their optimum, JSAW has set up a waste heat recovery power plant with capacity of 30 MW. This is a CDM project aimed at utilising waste heat from the Coke Oven Plant. This project consists of 4 waste heat recovery boilers connected to the coke ovens. Each boiler receives around 45,000-68,000 Nm<sup>3</sup>/h waste gas at 1065°C approximately.

The objective of this project is to tap the heat from the flue gases exhausting presently at 260°C into the chimney and utilise in the cultivation furnaces / Driers operating at 55°C. Since the temperatures are lower, water is used as the transfer medium and circulated between the furnaces and cultivation furnaces / driers through finned heat exchangers in closed loop.

At JSAW, we don't just adhere to minimum compliance levels set by CPCB / SPCBs, but try to exceed them wherever possible. Our teams are continuously involved in finding innovative solutions to reduce emissions and waste generated, methods to recycle and reuse waste and create maximum value for the Company. Hence, while meeting these permissible limits is important for us, what is more important is to continuously improve our own threshold limits.

JSAW intends to conduct its business as per the law of the land; however, in the last few years, we have received some legal notices. We are taking steps to rectify wherever necessary. As on end of FY2016-17, there are 26 cases that were pending, on which we are deliberating with the authorities to resolve.



*Does the company identify and assess potential environmental risks? Y/N*

*Does the company have any project related to Clean Development Mechanism? If so, provide details thereof, in about 50 words or so. Also, if Yes, whether any environmental compliance report is filed?*

*Has the company undertaken any other initiatives on - clean technology, energy efficiency, renewable energy, etc. Y/N. If yes, please give hyperlink for web page etc.*

*Are Emissions/Waste generated by the company within the permissible limits for the financial year being reported?*

*Number of show cause/legal notices received from CPCB/SPCB which are pending (i.e., not resolved to satisfaction) as on end of FY.*

**Conservation of low-grade minerals:**

JSAW undertakes numerous initiatives to conserve valuable resources. Our main raw material, iron ore is sourced from an iron ore mine allotted to the company in Bhilwara, Rajasthan, for the purpose of manufacturing Iron pellets at its Bhilwara plant. The lease area allotted to JSAW forms a part of Pur-Banera belt of iron ore deposit that consists of low-grade magnetite iron ore (Avg. 25% Fe), which is deep-seated and had remained unused so far, even though it was explored by Geological Survey of India way back in the year 1969-1970. However, JSAW took up the challenge to mine and beneficiate low-grade magnetite iron ore, using state-of-the-art technologies and innovative ideas. The Company has used magnetic separation and other beneficiation methods to upgrade the low-grade iron ore from 25% Fe to 65% Fe, while at the same time being in compliance with the environmental laws. By doing so, the company has been able to utilize the low-grade iron ore that would otherwise have been wasted and also conserved higher quality iron ore, in the process.

Through this pioneering work, the Company is creating sustainable value by making JSAW the only captive concentrate producer of Magnetite Iron ore in the country. JSAW has been awarded and recognized for the 'best environmental management and conservation of low-grade minerals'.

**Raw Material Consumption:**

Pellet Plant Specific Consumption (Kg/ton of Pellet)				
Raw Material	FY 13-14	FY 14-15	FY 15-16	FY 16-17
Iron Ore Concentrate	1,002.2	994.5	1,002.3	992.5
Pellet Fines	6.1	5.5	6.8	7.0
Bentonite	14.1	11.0	12.6	11.8
Lime	0.4	0.9	1.0	0.7
<b>Total</b>	<b>1022.8</b>	<b>1011.9</b>	<b>1022.7</b>	<b>1012.0</b>

**Energy Conservation:** That's not all, pellet production process from magnetite concentrate requires about 40% less energy as compared to pellets produced from hematite iron ore as the reaction of magnetite oxidation to hematite is exothermic in nature so about 40% energy is supplied through internal reactions.

In addition JSAW has been able to further reduce energy consumption per ton of Pellet by optimum utilization of coal, burner efficiency, consistence & stable operation, higher production rate and high plant availability.

Year	Energy Consumption (KCal/ton)	Energy Consumption (KCal/ton) for Pellet production through hematite iron ore
FY 13-14	2,08,382	2,50,000 to 3,00,000
FY 14-15	1,85,057	
FY 15-16	1,51,356	
FY 16-17	1,49,157	

**Quality:** Pellets produced from Magnetite concentrate are superior in quality as compared to other iron ore products. Hence, not only has the Company succeeded in making good quality pellets from low-grade iron but also conserved valuable raw material. In the process, it is also conserving energy and reducing carbon dioxide emissions by about 40% compared to Hematite pellets and 80% as compared to the sintering process.



JSAW awarded for environmental management and conservation of low-grade minerals



### Water Conservation

Water is a scarce commodity in the state of Rajasthan, Bhilwara district is among 19 of the total of 33 districts in the state, where the water crisis is more severe than the others.

JSAW is operating a sewage treatment plant of 10 MLD in Bhilwara city, Rajasthan. This sewage treatment plant treats the Sewage of the entire Bhilwara city through Cyclic Activated Sludge (C-Tech) & Sequential Batch Reactor (SBR) technologies and the treated clean water is being used to meet 100% water requirements in all mining, mineral beneficiation, pellet process, cooling, dust suppression, horticulture/ plantation areas of the JSAW Bhilwara Plant. By installing the above technologies and their efficient operation, water recovery has increased and the recovered water is recycled.

Year	Water Recovered (M <sup>3</sup> ) By installation of thickeners and filtration equipment
FY 13-14	576.699
FY 14-15	848.435
FY 15-16	936.892
FY 16-17	1129.360

Specific water consumption during the whole process of mineral beneficiation and pellet production etc. is also reduced.

Year	Water Consumption per ton of Pellet production (M <sup>3</sup> /ton of Pellet)
FY 13-14	4.67
FY 14-15	1.28
FY 15-16	1.11
FY 16-17	0.88

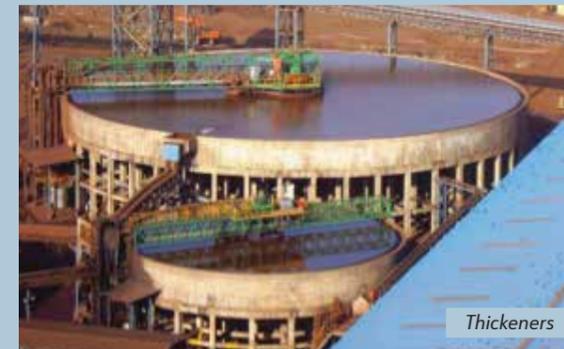
Domestic wastewater generated from office toilets is being treated at the in-house STP through Geo Green Bio-filter technology and treated water is used for plantation.

JSAW, Bhilwara is continuously striving to conserve natural resources and environment by adopting clean and green technologies. The sewage treatment plant in Bhilwara helps in reducing sewerage water pollution and at the same time meets the water requirement for plant operations.



### 10 MLD STP Plant

Water contained in tailing and concentrate during beneficiation of ore is being recovered with the help of thickeners, ceramic disc filters & advanced filter press technologies and is being reused in the plant processes. There is zero discharge of effluent from the mining lease area and the Plant. The same system is also helping to conserve water resources.



Thickeners



Ceramic Disc Filters



Filter Presses

### STP - GEO Green Bio-filter Technology

Additionally, Rain water harvesting / ground water recharge structures have been installed in mining, beneficiation and pellet plant area for preservation and recharge of ground water. By doing so, and adopting the zero discharge system in the plant, JSAW is conserving precious natural water resources.



**Waste Heat Recovery Plant at Samagoga under CLEAN DEVELOPMENT MECHANISM PROJECT (CDM)**

The process of refining iron in a blast furnace is extremely heat-intensive. The Blast Furnace is first required to heat up, accepting a maximum of 20 hU/t. Only once the operating temperature is reached, does the processing start, requiring 1hU/t to keep up the heat level. In the process, a lot of heat is wasted.

Building further on its commitment to minimize wastage and utilize resources to their optimum, JSAW has set up a waste heat recovery power plant with capacity of 30 MW. This is a CDM project aimed at utilising waste heat from the Coke Oven Plant. This project consists of 4 waste heat recovery boilers connected to the coke ovens. Each boiler receives around 45,000-68,000 Nm<sup>3</sup>/hr waste gas at 1065°C approximately.

**Heat Recovery Project at BLAST FURNACES (BF)**

The objective of this project is to tap the heat from the flue gases exhausting presently at 260°C into the chimney and utilise it in the cultivation furnaces/driers operating at 55°C. Since the temperatures are lower, water is used as the transfer medium and circulated between the furnaces and cultivation furnaces/driers through finned heat exchangers in a closed loop.

**Methodology**

- Flue gas from the furnace is tapped from the flue-duct carrying the gases to the chimney with the aid of inducted draft fan.
- The hot gases at 260°C are passed through a finned heat exchanger. The water circulating inside the finned heat exchanger absorbs this heat and hot water at nearly 90°C is stored in a hot water tank installed near by.
- The hot gases are cooled to nearly 125°C and are put back into the chimney.
- The hot water is carried to 22 furnaces/driers with 38 heat exchangers presently being heated by LPG firing, steam from Furnace oil-fired boiler & BFG fired boiler.
- This hot water at 90°C is sent through new finned heat exchangers to be installed in the air duct above the ovens which heats the circulating air to maintain 55°C inside the cultivation furnaces/driers.

**Other initiatives to reduce power consumption:**

1. The company has installed air-cooled condensers instead of a cooling tower at the waste heat recovery power plant to reduce water consumption.
2. The Company has developed a modified technology coke-quenching tower instead of manual quenching and is saving about 50% water consumption.
3. Replacement of LT transformer into HT transformer at DISP induction furnace.

Details on Generation & Consumption of Blast Furnace gas as follows:

S.No	Year	Generation (M <sup>3</sup> )	Consumption (M <sup>3</sup> )	Utilization (%)
1.	2014	87,91,17,465	61,80,86,289	70.31%
2.	2015	88,32,13,545	73,67,96,301	83%
3.	2016	99,94,12,163	82,76,31,721	83%

The above table depicts that we are continuously striving to utilize maximum possible BF gas at all possible areas in place of conventional/ fossil fuel. Our target is to utilize 100% clean BF gas.

**Energy saving through various measures:**

Energy saving has been carried out by installation of solar energy panels and energy efficient LED lights. Energy saving initiatives were also taken up by optimization of operation, improvement in efficiency of operational equipment and maintaining Power Factor (PF) 0.99 in Grid Sub Station (GSS).



**Principle 7: Advocacy and Public Policy**

*“As a significant player in the pipes manufacturing business in India, we participate in various industry forums and government bodies to put forward our views on what is best for the industry at the national and international level. We do it in a responsible manner taking into consideration industry-wide risks and concerns.”*

We actively participate in various industry and business associations. We are a member of the following industry bodies:

- International Pipe Line & Offshore Contractors Association (IPLOCA);
- Confederation of Indian Industry (CII);
- Australian Pipelines & Gas Association (APGA), Australia;
- Indian Chamber of Commerce & Industry (ICCI);
- Associated Chambers of Commerce and Industry of India (ASSOCHAM);
- PHD Chamber of Commerce and Industry (PHDCCI).

JSAW is a significant player in the industry and its views are often sought by the Government on policy formulation and other matters. When asked for, the company is forthcoming about its views on what is best for the industry and does so in a responsible manner at both national and international levels.

We have extensively advocated for Policy change with regard to making places of public interest more accessible for people with reduced mobility. A testimony of the efforts in this direction includes:

- Changes made to physical infrastructure in and around the monuments in Fatehpur Sikri, Qutub Minar, etc.;
- Including aspects in the Building Code that enables people with reduced mobility to ensure easy access to built environment in the country;
- Consultations with Municipal Corporations to make places of public interest more accessible for all.

*Is your company a member of any trade and chamber or association? If Yes, Name only those major ones that your business deals with?*

*Have you advocated/lobbied through above associations for the advancement or improvement of public good? Yes/No; if yes specify the broad areas (Governance and Administration, Economic Reforms, Inclusive Development Policies, Energy security, Water, Food Security, Sustainable Business Principles, Others)*



**Principle 8: Inclusive growth and equitable development**

*“We remain steadfast on our objective of pursuing holistic growth with responsibility towards people and the communities we operate in. We are committed towards providing equitable access to the underprivileged, focussing primarily on people with reduced mobility. We take numerous initiatives in the vicinity of our operations to enable people with reduced mobility to move with dignity.”*

We are deeply committed to inclusive growth and development. We have a CSR policy approved by the Board and in line with requirements of the Companies Act, 2013. We have also taken initiatives in this sphere, providing equitable access of resources to the underprivileged and maintaining a harmonious equation with the ecosystem that we thrive in.

JSAW is also committed to support the O P Jindal Trust, under which, various educational institutes have been set up. In addition, the Company conducts its own initiatives under the Sminu Jindal Charitable Trust, through an initiative called ‘Svayam’ that works to enable people with reduced mobility to help them move with dignity. The Company also conducts numerous development projects directly in the vicinity of its manufacturing locations.

*Does the company have specific programmes/initiatives/projects in pursuit of the policy related to Principle 8? If yes details thereof.*

*Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/any other organization?*

While the Company has not initiated impact assessment of its initiatives yet, Svayam's work in the area of enabling people with reduced mobility was recognised by the Times of India Social Impact Awards for 2 consecutive years; 2011 and 2012. The company spends INR 6.78 Crores across its various CSR initiatives across corporate and plant level projects. Details of projects are provided in Annexure-1 of the Annual Report on Page #25.

The combined efforts of Svayam and the Archaeological Survey of India (ASI) were recognised when the Fatehpur Sikri group of monuments in Agra bagged the prestigious National Tourism Award 2011-12 for "the best maintained and disabled-friendly monument". The award was presented by the then President of India, Shri Pranab Mukherjee and presided over by Minister of State for Tourism Shri K. Chiranjeevi.

Svayam conducted an access audit of Fatehpur Sikri and shared the access strategies with ASI to make the heritage site inclusive and welcoming for everybody while addressing different demographic needs. ASI implemented the audit recommendations with Svayam handholding them through the entire process. Access provisions like ramps, signage, accessible toilet units, accessible ticket counters, dedicated parking facility, defined access route etc. make the heritage site of Fatehpur Sikri a disabled-friendly monument.

Svayam has contributed to the development of "Harmonized Guidelines & Space Standards for Barrier Free Built Environment for Persons with Disabilities & Elderly Persons" (Ministry of Urban Development, Govt. of India, issued in Feb 2016) - These guidelines have now been made enforceable in the "Rights of Persons with Disabilities Rules 2017" for the purposes of built environment.

Svayam has also contributed in developing the standards on accessibility in built environment and has provided substantial inputs for the concerned section in the National Building Code 2016 (part III). This has become a reference point for the entire country to ensure easy access for people with mobility issues in buildings across the country.

*Have you done any impact assessment of your initiative?*

*What is your company's direct contribution to community development projects - Amount in INR and the details of the projects undertaken.*

*Have you taken steps to ensure that this community development initiative is successfully adopted by the community? Please explain in 50 words, or so.*

### Enabling people with reduced mobility:

At Jindal Saw, we believe that the true meaning of success is not found in balance sheets but in the lives of those we have benefitted by our actions. It is with this philosophy that 'Svayam' a Trust supported by JSAW was set up to undertake the Company's CSR initiatives. Svayam is driven by an approach that underlines three core steps namely, Awareness, Involvement and Sustainable Results and works mainly in the domain of 'Universal Accessibility'.

### CSR initiatives during FY16-17

#### Project 1: Modification and Provision of Accessible Maruti EECO Vans to promote inclusive para-transit.

Impact: Many people who were either lifted physically, in an undignified way into cars/vehicles could now move in a more dignified way.

- More people became aware of the concept of accessible cars that accommodate not just wheelchair users but were also beneficial for others with reduced mobility;
- Ezymov has extended its the services of accessible taxi/car to cancer patients travelling to and from TATA Memorial Hospital; thereby easing the lives of cancer patients ;
- Sakha - a cab service by women for women 24x7 is extending its accessible taxi services to persons with disabilities, women & families.

#### Project 2: Workshop on India's first 'Teacher Training Certificate Program' on inclusive education for children with special needs.

Impact: This training programme helped teachers to imbibe the knowledge and skills necessary to include children with special needs in arts, music, sports and other creative activities of Bal Bhavan.

#### Project 3: Mumbai #Reclaim your street

Impact:

- The project successfully spread awareness among the BMC workers as well the local public;
- Many streets were cleaned and made accessible in the process.

#### Project 4: Awareness through Twitter Campaign #Accessibility4All

Impact: 2100 re-tweets, 9.9 million impressions. Svayam created a digital storm and reached a global audience base.

#### Project 5: Access audits across 8 Cities (under Accessible India campaign)

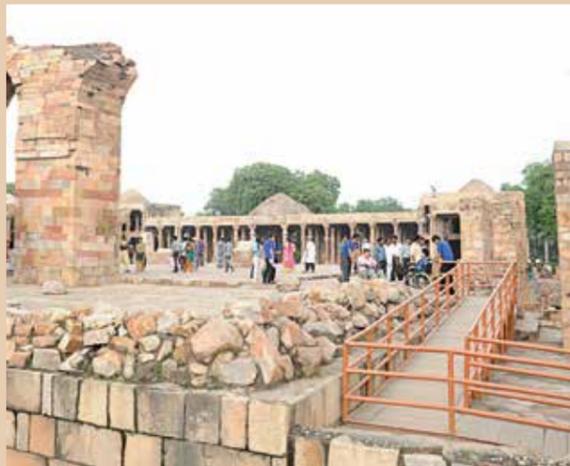
Impact: The Audits created a massive awareness amongst the stakeholders, and accessibility implementation began with full force. Post implementation, these buildings will give a barrier-free access to persons with disabilities (PwD), which will make them work-worthy.

#### Impact Assessment by an external party:

In 2011, Svayam was shortlisted by Times of India Social Impact Awards as one of the three organizations in the Empowerment and Advocacy category. A total of fifteen hundred contenders were in the fray. This is a true recognition of our work in promoting accessibility and barrier free infrastructure in the community for the benefit of all and especially those living with reduced mobility due to various reasons.

The awards seek to recognize and encourage the noble efforts of often-faceless groups to bring about change in the lives of India's marginalized.

**In 2016, Svayam's initiative, "Best Practices of Universal Accessibility in India" based on its efforts to create Accessible Heritage Tourism saw its place among the 6 Best Practices included in UNWTO's Theme Brochure for World Tourism Day 2016.**





### Principle 9: Customer Engagement

*"At JSAW, customers come first. We believe in providing the best quality of products to our customers at the best price. Product information and specifications are displayed clearly in the product labels."*

JSAW has stringent quality standards due to which we get very few complaints from our customers and barely any of a serious nature. However, when we do, we ensure they are resolved as soon as possible.

Over the last 5 years, we have barely had any customer complaints; only 2 minor complaints were received in 2015-16 which were resolved immediately and there is no pendency.

JSAW manufactures pipes for various industries and adheres to highest quality standards. The company labels its products with complete product information and specifications. The company caters to customers in various countries and its product information captures all relevant information. In some cases, additional customer requirements are also added.

There is an anti-dumping duty that has been applied to all Indian Pipe manufacturers when they export pipes to USA and Canada on DI Pipes and on Large Diameter pipes while exporting to Mexico. This is a country-specific and not a company-specific duty that we have to pay.

### The Road Ahead

Jindal Saw Limited has been built on sound principles of sustainability, responsibility and good governance and we are pleased to share the various initiatives, projects and related achievements that we have been implementing in this area through this Business Responsibility Report. While this is our first step in the journey of disclosing information on our Business Responsibility and Sustainability practices, we are eager to align ourselves to a culture of regular reporting and simultaneous continuous improvement of our sustainability practices. We consider sustainability an integral part of our business, and in future we intend to bring in this concept in our reporting as well. As we move forward on this journey, we will continue to find innovative solutions, build capacities and capabilities and create enablers to help us raise our own standards of excellence in sustainability and business reporting.

*What percentage of customer complaints/consumer cases are pending as on the end of five years?*

*Does the company display product information on the product label, over and above what is mandated as per local laws? Yes/No/N.A. /Remarks (additional information)*

*Is there any case filed by any stakeholder against the company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last 5 years and pending as on end of financial year. If so, provide details thereof, in about 50 words or so.*

## List of Abbreviations

APGA	Australian Pipelines & Gas Association
ASI	Archaeological Survey of India
ASSOCHAM	Associated Chambers of Commerce and Industry of India
BMC	Bombay Municipal Corporation
BR	Business Responsibility
CDM	Clean Development Mechanism
CII	Confederation of Indian Industry
CPCB	Central Pollution Control Board
CSR	Corporate Social Responsibility
C-Tech	Cyclic Activated Sludge
CEO	Chief Executive Officer
DGMS	Director General of Mines Safety
DI	Ductile Iron
ESP	Electrostatic precipitator
Fe	Iron
GBF	Green Bio Filters
GSS	Grid Sub Station
HR	Human Resource
ICCI	Indian Chamber of Commerce & Industry
IPLOCA	International Pipe Line & Offshore Contractors Association
IR	Integrated Reporting
ISO	International Organisation for Standardisation
JSAW	Jindal Saw Limited
LED	Light Emitting Diode
LPG	Liquefied Petroleum Gas
MLD	Million Litre per day
NGOs	Non-Government Organizations
NVG	National Voluntary Guidelines
O & M	Operations and Management
OHSAS	Occupational Health and Safety Assessment Series
PF	Provident Fund
PwD	People with Disability
PPE	Personal Protective Equipment
SBR	Sequential Batch Reactor
SDGs	Sustainable Development Goals
SEBI	Securities and Exchange Board of India
SPCB	State Pollution Control Board
STP	Sewage Treatment Plant
WCI	Workmen's Compensation Insurance

### **We solicit your feedback**

How do you like this Report? What more would you like to see in our next Report? Would you have any specific suggestion to improve our disclosure?

Please share your feedback to:

**Sunil K. Jain**

**Company Secretary**

**Email: [sunil.jain@jindalsaw.com](mailto:sunil.jain@jindalsaw.com)**



Corporate Office:  
12, Bhikaiji Cama Place,  
New Delhi - 110 066, India  
Phone : +91-11-26188345,  
Website: [www.jindalsaw.com](http://www.jindalsaw.com)