



Business
Responsibility Report
2019-20

Introduction To JSWEL's BRR

The Directors of JSW Energy Limited (JSWEL) present the Business Responsibility Report (BRR) of the Company for the financial year ended 31st March 2020, pursuant to Regulation 34(2)(f) of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (SEBI LODR Regulations).










For JSWEL, the key to progressive business is responsible business. The Company believes that social awareness and responsible operations of a business makes a sustainable organisation thereby achieving consistent growth. JSWEL follows the highest standards of corporate governance principles and

best practices by adopting the Corporate Governance Policies and Code of Conduct. Through this Business Responsibility Report (BRR), JSWEL communicates with its stakeholders on various areas of its performance and responsibilities.

The Report adheres to the BRR requirement of the SEBI LODR Regulations and the National Voluntary Guidelines (NVGs) on Social, Environmental, and Economic responsibilities of business as outlined by the Ministry of Corporate Affairs, India. In addition to this, JSWEL publishes its sustainability performance in the Annual Report, which is prepared in accordance with the Global Reporting Initiative (GRI) standards.

The NVG Principles

Objective: The National Voluntary Guidelines (NVG), released by the Ministry of Corporate Affairs, have defined nine principles that are developed on India's socio-economic context and priorities. These interrelated and interconnected principles also take into consideration the global best practices towards conducting a responsible business.

	P1 Ethics, Transparency and Accountability Businesses should conduct and govern themselves with ethics, transparency and accountability
	P2 Product Life Cycle Sustainability Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle
	P3 Employee Welfare Businesses should promote the well-being of employees
	P4 Engaging with Stakeholders Businesses should respect the interests of, and be responsive towards all stakeholders, especially who are disadvantaged, vulnerable and marginalised
	P5 Human Rights Businesses should respect and promote human rights
	P6 Environment Protection Businesses should respect, protect and make effort to restore the environment
	P7 Policy Advocacy Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner
	P8 Growth and Development Businesses should support inclusive growth and equitable development
	P9 Customer Interests Businesses should engage and with and provide value to their customers, and consumers in a responsible manner

Section A: General Information About The Company

Sr. No.	Disclosure Item	Response
1.	Corporate Identity Number (CIN) of the Company	L74999MH1994PLC07704I
2.	Name of the Company	JSW Energy Limited
3.	Registered Address	JSW Centre, Bandra Kurla Complex Bandra (East), Mumbai – 400 051
4.	Website	www.jsw.in
5.	E-mail ID	jswel.investor@jsw.in
6.	Financial Year Reported	FY2019-20
7.	Sector(s) that the Company is engaged in (industrial activity code-wise)	1) Generation of Thermal Power 2) Generation of Hydro Power 3) Power Transmission 4) Power Trading NIC Code: 351 Electric Power Generation, Transmission and Distribution
8.	List three key products/services that the Company manufactures/provides (as in balance sheet)	1. Power Generation (Thermal and Hydro) 2. Power Transmission 3. Power Trading
9.	Total number of International Locations (Provide details of the major 5 locations)	Following are the key subsidiaries companies of JSWEL located in South Africa: 1. South Africa Coal Mining Holdings Limited (SACHM) 2. Umlabu Colliery Proprietary Limited 3. SACM (Breyten) Proprietary Limited 4. Jigmining Operations No.1 Proprietary Limited All above subsidiaries are involved in Coal Mining & Ancillary activities
	Total number of National Locations	1. JSW Energy Vijayanagar, Toranagallu, Karnataka – owns & operates 860 MW Thermal Power Plant 2. JSW Energy Ratnagiri, Jaigad, Maharashtra – owns & operates 1200 MW Thermal Power Plant 3. JSW Energy (Barmer) Limited - Barmer, Rajasthan - owns & operates 1080 MW Thermal Power Plant & operates lignite mining 4. JSW Hydro Energy Limited – owns & operates a) 1,091 MW Karcham-Wangtoo HEP, Sholtu, Himachal Pradesh b) 300 MW BASPA - II HEP, Sholtu, Himachal Pradesh 5. JSW Energy (Kutehr) Limited - developing 240 MW HEP at Kutehr, Himachal Pradesh 6. JSW Energy (Raigarh) Limited - Raigarh, Chhattisgarh – developing 1,320 MW thermal power project 7. JSW Power Trading Company Limited – located at Delhi and is involved in power trading 8. Jaigad PowerTransco Limited (JPTL) – Chiplun, Maharashtra – owns & operates 330 ckt km transmission line

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Sr. No.	Disclosure Item	Response
10.	Markets served by the Company – Local/State/ National/International	<p>Long term power supply under Power Purchase Agreements (PPAs) to following State Distribution Companies:</p> <ol style="list-style-type: none"> 1. Maharashtra State Electricity Distribution Company (MSEDCL), 2. Rajasthan Discoms: Jaipur Vidyut Vitran Nigam Limited, Ajmer Vidyut Vitran Nigam Limited and Jodhpur Vidyut Vitran Nigam Limited 3. Uttar Pradesh Power Corporation Limited (UPPCL), 4. Haryana Power (HPPC), 5. Himachal Pradesh State Electricity Board Limited (HPSEBL), 6. Punjab State Power Corporation Limited (PSPCL). <p>Short term power supply to following State Distribution Companies: Andhra Pradesh, Karnataka, Telangana, Tamil Nadu</p>

Section B: Financial Details Of The Company (2019-20)

1.	Paid-up Capital (INR in crore)	1,641.90
2.	Total Consolidated Turnover (INR in crore)	8,559.69
3.	Total Consolidated profit After Taxes (INR in crore)	1,099.92
4.	Total Spending on Corporate Social Responsibility (CSR) as a percentage of profit after tax (%)	1.52% (Company spent on CSR is 2% of last 3 years average net profit)
5.	List of activities in which expenditure in 4 above has been incurred	<ol style="list-style-type: none"> a. Improving Living Conditions b. Promoting Agriculture and Watershed c. Promoting Social Development and Employability d. Addressing Social Inequality e. Addressing Environment Concerns f. Preserving National Heritage g. Promoting Sports Development h. Promoting Swachh Bharat Abhiyaan (Clean India Mission)

Section C: Other Details

Sr. No.	Disclosure Item	Response
1.	Does the Company have any Subsidiary Company/ Companies?	<p>Yes</p> <p>List of Subsidiaries:</p> <ol style="list-style-type: none"> 1. JSW Energy (Barmer) Limited. 2. JSW Hydro Energy Limited 3. Jaigad Power Transco Limited 4. JSW Energy (Raigarh) Limited 5. JSW Power Trading Company Limited 6. JSW Solar Limited 7. JSW Electric Vehicles Private Limited 8. JSW Energy (Kutehr) Limited 9. JSW Renewable Energy (Vijayanagar) Limited 10. JSW Renew Energy Limited 11. JSW Energy Natural Resources Mauritius Limited 12. JSW Energy Natural Resources South Africa (Pty) Limited 13. South African Coal Mining Holdings Limited 14. Royal Bafokeng Capital (Pty) Limited 15. Mainsail Trading 55 Proprietary Limited.

Sr. No.	Disclosure Item	Response
		16. Jigmining Operations No 1 Proprietary Limited 17. SACM (Breyten) Proprietary Limited 18. South African Coal Mining Operations Proprietary Limited 19. Umlabu Colliery Proprietary Limited 20. Yomhlaba Coal Proprietary Limited
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)	Yes. JSW Energy (Barmer) Limited and JSW Hydro Energy Ltd. participate in the BR initiatives of the parent Company.
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%]	JSW Energy's value chain partners (e.g., suppliers and contractors) are encouraged to contribute to its CSR initiatives. However, with the expansive nature of its value chain, currently less than 30% of the entities partner in its BR initiatives.

Section D: Business Responsibility (BR) Information

1. Details of Director/ Directors responsible for BR

(a) Details of the Director/ Directors responsible for the implementation of the BR policy/ policies

No.	Particulars	Details
1.	DIN Number	00019442
2.	Name	Mr. Nirmal Kumar Jain
3.	Telephone	022-42861000
4.	E-mail ID	jswel.investor@jsw.in

(b) Details of the BR Head

No.	Particulars	Details
1.	Name	Mr. Sharad Mahendra
2.	Designation	Whole - time Director & COO
3.	Telephone Number	022-42861000
4.	E-mail ID	jswel.investor@jsw.in

2. Principle-wise (as per National Voluntary Guidelines) BR Policy/policies (Reply in Y/N)

	Disclosure item	Response								
		P1	P2	P3	P4	P5	P6	P7	P8	P9
1	Do you have a policy / policies for:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Has the policy been formulated in consultation with relevant stakeholders?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	Does the policy conform to any national / international standards? If yes, specify? (50 words)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	A. National Voluntary Guidelines on Social(NVG), Environmental and Economic Responsibilities of Business B. ILO Convention on Human Rights C. Report on Affirmative Action by CII D. National Action Plan on Climate Change, National Environmental Policy E. UN Sustainable Development Goals									
4	Has the policy been approved by the Board?	Yes, at the Board Meeting held on 23 rd March, 2017								

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	Disclosure item	Response								
	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
	If yes, has it been signed by MD / owner / CEO / appropriate Board Director?	Yes, it has been signed by the Joint Managing Director & CEO								
5	Does the company have a specified committee of the Board / Director / Official to oversee the implementation of the policy?	Yes, Risk Committee of the Board is responsible to oversee the implementation								
6	Indicate the link for the policy to be viewed online?	http://www.jsw.in/sites/default/files/assets/downloads/energy/Corporate%20Governance%20and%20Regulatory%20Information/Policies/Responsible%20Business%20Policy.pdf								
7	Has the policy been formally communicated to all relevant internal and external stakeholders?	Currently, the policy has been uploaded on the Company's website and is communicated through the Business Responsibility Report as well as Annual Report FY2018. However, it is proposed to formally communicate the policy to all relevant internal and external stakeholders.								
8	Does the company have in-house structure to implement the policy/ policies?	The Company has Board Level Committees, example, Risk Management Committee to oversee, guide and approve initiatives under BR. The various down the line concerned committees/ HOD's, example, CSR, Sustainability, HR, Operations etc at all the plants work as per the policies & corporate guidelines to take forward and complete the initiatives undertaken and submit the progress from time to time for evaluation & guidance.								
9	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/policies?	Yes, While institutional shareholders can write to nitin.narayanan@jsw.in , non-institutional shareholders can write to jswel.investor@jsw.in about their queries and concerns								
10	Has the company carried out independent audit/evaluation of the working of this policy by an internal or external agency?	No								
2a	If answer to S. No. 1 against any principle, is 'No', please explain why: (Tick up to 2 options)									
	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1	The company has not understood the Principles	Not Applicable								
2	The company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles									
3	The company does not have financial or manpower resources available for the task									
4	It is planned to be done within next 6 months									
5	It is planned to be done within the next 1 year									
6	Any other reason (please specify)									

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	The Risk Committee of the Board meets within 3-6 months every year.
Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?	The Business Responsibility Report is available on the Company website at the link www.jsw.in/investors/energy This will be a regular annual publication.

SECTION E: LINKAGE OF JSWEL'S POLICIES WITH THE BR NVG PRINCIPLES

Principle No.	NVG Principle Document	Reference
1	Businesses should conduct and govern themselves with ethics, transparency, and accountability	
2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle	
3	Businesses should promote the well-being of all employees	
4	Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised	
5	Businesses should respect and promote human rights	
6	Businesses should respect, protect, and make efforts to restore the environment	
7	Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner	
8	Businesses should support inclusive growth and equitable development	
9	Businesses should engage with and provide value to their customers and consumers in a responsible manner	

Principle Wise Performance Disclosure

Principle 1: Ethics, Transparency and Accountability

1. Does the policy relating to ethics, bribery and corruption cover only the company? (Yes/ No). Does it extend to the Group/Joint Ventures/ Suppliers/Contractors/NGOs / Others?

The Company's Policy on ethics, bribery and corruption includes within its ambit all the employees, including those with the Subsidiary Companies at all levels and grades, as also the Directors on the Board. The efficacy and performance of the Company's Whistle-blower Policy and Code of Ethics are reviewed by the Audit Committee of the Board. In some of the Subsidiaries, the Policy has been extended to cover vendors and contractors. It is intended to extend the Policy to cover other external key stakeholders over a period of the next 3 years. The existing Code of Conduct for Board Members and senior management executives covers only the Company.

2. How many stakeholder complaints have been received in the past financial year and what percentage was satisfactorily resolved by the management? If so, provide details thereof, in about 50 words or so.

10 complaints were received from the shareholders in FY2019-20 and all were resolved.

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Principle 2: Products and Services designed with environmental and social opportunities

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

- Electricity generation through fossil fuel
- Electricity generation through hydro power
- Power Trading

JSW Energy Limited believes in the efficient utilisation of all available resources. Today it is a leading, full-spectrum, integrated power company, with presence across the power sector value chain. Living up to this strong legacy by managing efficient operations, enhancing social and economic benefits, minimising environmental impacts, and employing cutting-edge innovation, JSW Energy has consolidated its place at the top of the ranks in India.

At all the generating stations of the Company:

- Employee and Environment: Safety and Occupational Health of the employees as well as contract workers is given utmost importance along with environmental management and regulatory compliance.
- Power Transmission: Various awareness sessions are conducted around high voltage lines on Safety to the employees and Associates.
- O&M Services: Various initiatives such as safety audits, inspections and training programs are conducted for improving safety and health of Associates.

Due to the continued focus on social and environmental risks as well as opportunities around the plant location all plants of JSWEL carry out in a planned manner many social activities in the surrounding regions. Due to these efforts our plants have won many accolades in the FY2019-20.

The JSWEL Barmer Plant won the following Awards in FY2019-20:

- Shining Glory Award - 2019" under "Business Excellence" and "Women Empowerment" category from Green Maple Foundation
- Rajasthan CSR Leadership Award 2019" under "Poverty Alleviation" category. Under individual application, Mr. Ranjan Sharma has been selected for 'CSR Leadership Award' category
- "National NGO & CSR Excellence Award 2019" for "Water & Sanitation 2019" presented at the 6th National NGO and CSR summit-2019

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- iv. Received "Certificate of Appreciation for Good Practices in Safety Systems" at 8th FICCI Safety Systems Excellence Awards for Industry 2019, New Delhi
- v. IPPAI "20th Regulators & Policymakers Retreat-2019" Award, certificate of excellence and trophy received for the Best Innovation

The Vijayanagar Plant won the following Awards in FY2019-20:

- i. Shining Glory Award-2019' by Green Maple Foundation, Chandigarh- Awarded on 26 May-2019 for Excellent Performance in Environmental Management
- ii. Global Environment Award 2019" by Energy and Environment Foundation, Delhi - Awarded on 23 August-2019 at Convention Centre, NDCC- New Delhi- for Achievement in Latest Environmental practices and Management
- iii. CII National Award for Excellence in Energy Management - 2019 by Confederation of Indian Industry(CII)- Awarded on 18th September 2019 at HICC(Hyderabad International Convention Centre) Hyderabad Awarded as Energy Efficient Unit - For the Energy conservation measures and Best practices adopted for conservation of Energy
- iv. "SEEM National Energy Management Award 2019" by Society of Energy Engineers and Managers,- Awarded on 26 September-2019 in the Awarding Ceremony scheduled at Islamic Cultural Centre, New Delhi - For the Energy conservation measures and Best practices adopted for conservation of Energy
- v. "State Level Safety Award - Best Power Boiler" by Director of Factories, Boilers, Industrial Safety & Health, Bangalore, Govt of Karnataka for Captive Power Plant # 1 boiler - Awarded on 04 March-2020- Got "First Prize" (Trophy & Certificate) For the best safe practices adopted
- vi. Certificate on Excellence in Safety to the Captive Power Plant #2 by JSW Steel Limited during the National Safety day celebrations on 4th March 2020 for maintaining commendable safety performance during the calendar year 2019

The Ratnagiri Plant won the following Awards in FY2019-20:

- i. The CII Awards for excellence in energy management-2019 by CII (for excellent energy efficient unit)
- ii. IPPAI Power Awards-2019 for Best operating thermal power Plant
- iii. 14th State level EC Award by MEDA - 1st Winner Award
- iv. Golden Bird Excellence Award Gold category.
- v. CII Sustainability Award - Certificate of Appreciation

These recognitions in every aspect, that is, CSR, Energy Conservation, Sustainability, Best Power Generator, Environment Management, and Innovation, amongst others reflect a consistent focus of the organisation on optimal efficiency, innovation, energy conservation and

environment management. The Company utilises a life cycle based approach and incorporates environmental and social concerns in the production of electricity, as well as in the selection of technology and equipment of higher efficiency. Further, risks and opportunities are identified at every stage of the operations.

The major steps in the life cycle of our products and major activities are summarised below:

Thermal Power Plants:

- **Sourcing of raw materials:** JSWEL procures primary fuel (viz., coal and lignite) as well as secondary fuels (e.g., heavy fuel oil and light diesel oil). Risks and opportunities are identified at the time of selection of coal while sourcing from multiple geographies. While selecting the source of coal, prime focus is on that type which has relatively less impact on the environment post combustion. On the other hand, JSW Energy Barmer Ltd uses lignite as a fuel source; lignite is a low-grade coal that is currently sourced from captive mines of the joint venture Barmer Lignite Mining Company Ltd.
- **Transportation of raw materials:** Imported coal utilised at Vijayanagar and Ratnagiri brought in by the sea route, and then transferred to the coal stockyards via rail at Vijayanagar and direct coal conveying system from the port to the plant premises at Ratnagiri. The lignite for JSWBL comes in from the contiguous Kapurdi Mines via belt conveyor and Jalpa Mines Via trucks over a distance of 4 km.
- **Production of electricity:** Risks and opportunities involved with thermal power production process are identified, and the risks are mitigated at the design stage itself; equipment having maximum efficiency is selected, and standard operating procedures are implemented. All environment-affecting parameters associated with the production processes are continuously monitored and maintained within the statutory limits.
- **Delivery of the product to the customer:** Efforts are taken to supply the electricity as per the requirement (schedule) of the customer.

Hydro Power Plants:

Hydro power is a form of renewable energy which is generated by non-consumptive use of water, and hence there is no reduction in the resource. During all stages of the product life cycle quality, occupational health and safety, and environmental parameters are considered important and awareness sessions for the risks, hazards involved and the safety systems and processes to be followed by employees and associates are held periodically. Regular inspections and safety audits are conducted in order to keep the systems healthy and avoid hazards, thereby improving the safety parameters for all employees and associates.

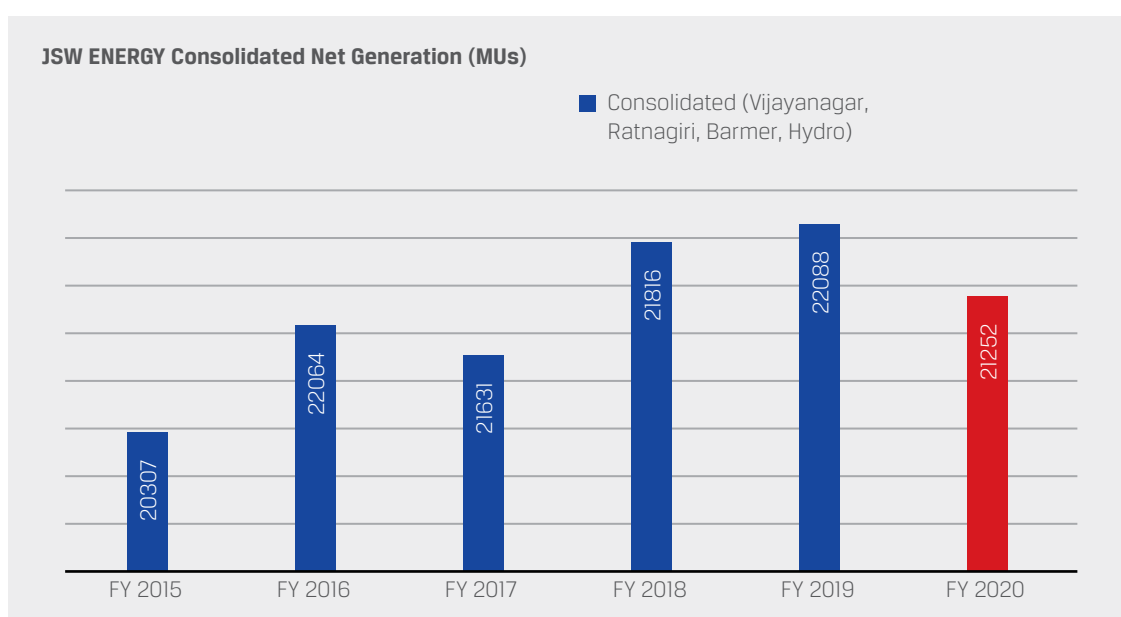
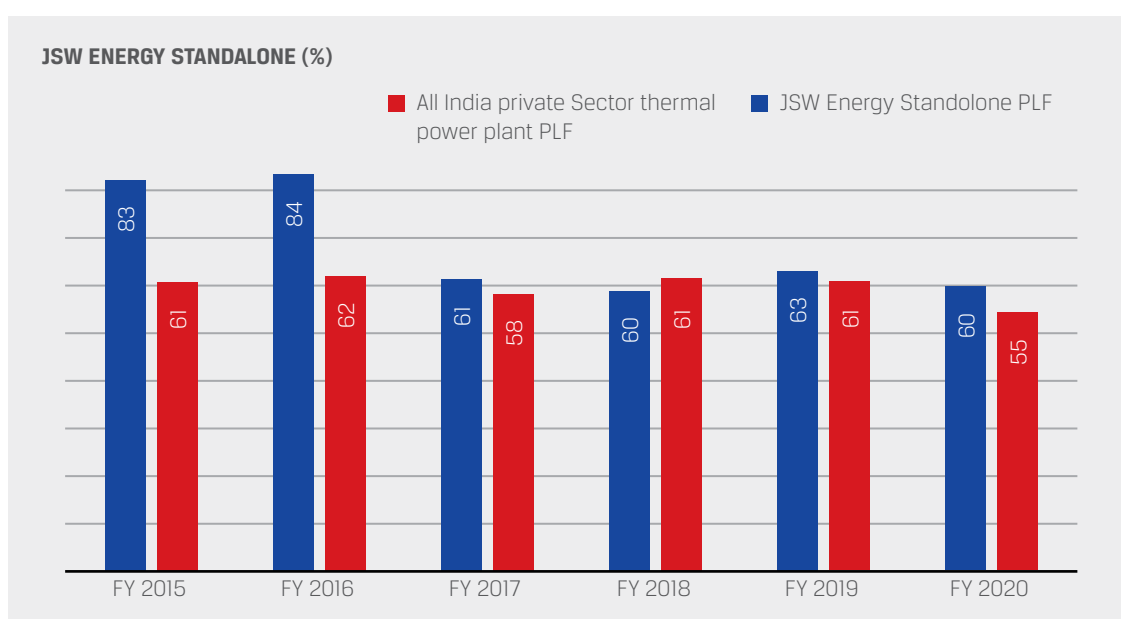
The plant are certified to the following management systems:

- Ratnagiri (1,200 MW): ISO 9001-2015, ISO 14001-2004, OHSAS 18001-2007, and ISO 50001-2011
- Vijayanagar (860 MW): ISO 9001-2015, ISO 14001-2015, BS OHSAS 18001-2007, and ISO 50001-2011
- Barmer (1,080 MW): ISO 9001-2015, ISO 14001-2015, OHSAS 18001-2007, and ISO 50001-2011
- Hydro Power (1,300 MW): ISO 9001-2015, ISO 14001-2015, and OHSAS 18001-2007

All of the above systems are designed for compliance towards social or environmental concerns, risks and/or opportunities in the power plants and are subject to regular audits.

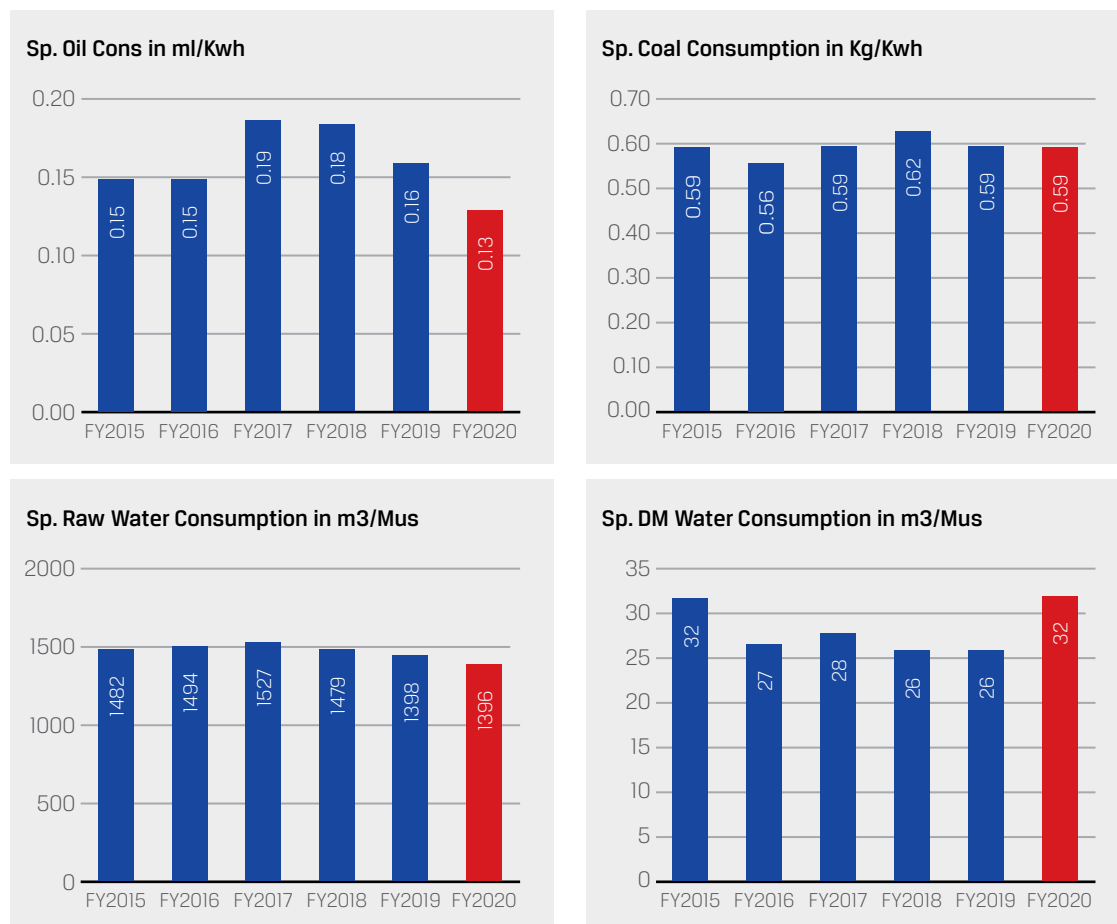
2. For each such product, provide the following details in respect of resource use (energy, water, raw material etc.) per unit of product (optional):

- i) Reduction during sourcing/production/ distribution achieved since the previous year throughout the value chain?
Generation:



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Performance Parameters: JSW Energy (Thermal - 3,158 MW), (Hydro - 1,391 MW)



ii) Reduction during usage by consumers (energy, water) has been achieved since the previous year?

Not Applicable since the Company is only into power generation and not into power distribution.

3. 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.

The Company recycles and utilises wastes, as per details furnished below:

Fly Ash Utilisation:

Vijayanagar (JSWEL)	Ratnagiri (JSWEL)	Barmer (JSWEL)
100 % for nearly a decade Cement companies: 77 % Ash pond bunds: 5 % Local Brick-making: 18 %	100 % for last 4 years Ready-mix concrete: 76% Cement plant: 9 % Bricks / blocks: 15 % FY- 19-20: Ready-mix concrete: 56 % Cement plant: 23 % Bricks / blocks: 21 %	100 % for last 3 years Cement companies: 64.29 % Bricks: 17.33% Mines backfilling: 18.37%

Recycle/ Reuse at Sites:

Ratnagiri:

Coal rejected from the pulverizers is re-used. The percentage of the rejected coal with respect to total coal used in FY 2019-20 is 0.13%.

The used oil / waste oil is included under the hazardous waste category and are therefore sent to government-approved vendors for recycling. Waste oil Disposed during FY 2019-20: 10.6 MT

Vijayanagar:

The details are furnished as below:

The coal rejected (100%) from the pulverizers are reused.

CW blowdown Water: 998,199 cum water is recycled in Reverse Osmosis (RO) Plant, and about 346,943 cum water re-used for steel plant Ore Beneficiation Plant (OBP). The entire wastewater is treated in the effluent treatment plant based on reverse osmosis (RO) technology, and the recycled product, i.e., water, is used in cooling towers as make-up water, while the RO reject stream is used for plantation. Thus, achieves Zero discharge of effluent water.

The waste oil / used oil is included under hazardous waste category, and are sent to government-approved vendors for recycling. Waste oil of 22,470 L (100%) and 100% e-waste disposed through KSPCB authorised recycler.

The e-wastes are disposed of through authorised recyclers. Other wastes, such as steel and wood are reused internally.

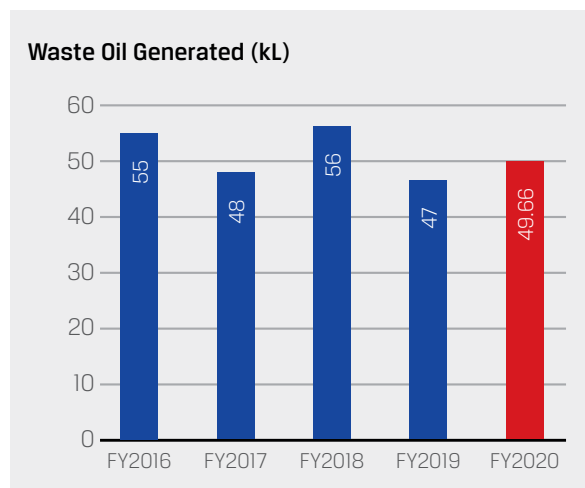
The food waste generated from canteen is used for bio generation and gas is used in canteen.

Barmer:

The used oil /waste oil is included under hazardous waste, and all of it is sent to the government-approved vendors for recycling.

The wastewater is treated in the reverse osmosis (RO) based effluent treatment plant and recycled water is combined with raw water as part of the feed to the demineralised water plant or as part of the make-up water to the cooling towers, while the RO reject water is used for plantations and ash/lignite spray, etc. Thus, zero effluent discharge is achieved.

The food waste is converted and used as organic compost.



4. Does the company have procedures in place for sustainable sourcing (including transportation)?

- i) If yes, what percentage of your inputs was sourced sustainably? Also, provide details thereof, in about 50 words or so.

Not applicable for Hydro generation

JSW Energy, Ratnagiri operates on imported coal and constantly attempts to make the sourcing and inbound logistics as sustainable as possible. The plant is

located on the coast; while all its imported coal comes via the sea route to the port at Ratnagiri, the coal is then transported to the stockyard inside the plant via covered conveyor belts.

The Company involves the local people right from the stage of the construction of the plants and in certain cases we train them. This benefits them in getting employment in future. We also encourage our contractors to involve the local people. In certain cases, we even employ the local people directly and engage them in Operation and Maintenance (O&M) activities. We also encourage the contractors to procure the construction materials from local and small Vendors. We have been promoting and encouraging small suppliers, predominantly civil contractors and transporters which help them in securing work contracts at nearby locations.

The Company has given a 3-year technical training course equivalent to diploma to 45 surrounding villages children (10th and 12th Pass) and absorbed them on company's payroll as Employees in the executive category.

The Company has given a 3-month technical course (Basic electrical, basic Electronics, welding technology) to 36 surrounding villages persons and involved them as associated employees.

JSW Energy, Vijayanagar 2X130 MW TPP is based on coal and gas and 2X300 MW is based 100 % coal. It strives to make the sourcing and inbound logistics as sustainable as possible. Imported coal for the plant is received by the sea route either at Goa or at Krishnapattanam, and then transported to the stockyard by rail in covered wagons, then to the plant via covered conveyor belts. In both cases all vendors are registered only after they sign up on a commitment on environment and social parameters.

The Company is also promoting and encourages surrounding areas local small suppliers, civil, housekeeping, horticulture contractors and transporters which help them in securing work contracts. Also encourage local people to involve in Operation and Maintenance (O&M) activities and to procure the construction materials from local and small Vendors.

The Company involves the local people right from the stage of the construction of the plants and we are providing apprenticeship to the ITI holders for their skill development and better employment opportunities.

The local contractors are being imparted with the best safety standard under contract safety management system thereby their capacity is enhanced to compete with their peers.

At JSW Energy (Barmer) Limited the lignite comes in from the Kapurdi Mines via belt conveyor and Jalipa Mines Via trucks over a distance of 4 km, it strives to make the sourcing and logistics as sustainable as possible. The conveyor is covered for its entire length making it a safe and environment friendly. Limestone is procured from RSMML (Govt. entity) mines which comes

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through trucks. The mines allot the secondary fuel to end user in sustainable way.

The Company is giving employment in horticulture and housekeeping work to the local manpower available. They are being given priority in housekeeping, horticulture contractors and transporters (like JCB, Dozer, dumpers, tractors etc.). We are providing technical and safety training in Plant KaushalVikas Kendra to the manpower working here, which makes them more reliable and employable in safe ways.

5. 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?

JSW Hydro Energy generates energy from hydro by non-consumptive use of water as raw material. The Company has not only implemented a variety of community development initiatives to support the local people around the project area, it also engages with local contractors for the CSR activities, especially construction related.

In order to improve their capacity and capabilities, engineers/supervisors from the Company are always monitoring their work and offer suggestions whereby they could improve and be more efficient.

JSW Energy, Ratnagiri operates on imported coal and constantly attempts to make the sourcing and inbound logistics as sustainable as possible. The plant is located on the coast; while all its imported coal comes via the sea route to the port at Ratnagiri, the coal is then transported to the stockyard inside the plant via covered conveyor belts.

The Company involves the local people right from the stage of the construction of the plants and in certain cases also trains them. This not only makes them employable but also actually get employed. The Company encourages its contractors to involve the local people. In certain cases, the Company even employs the local people directly, and engage them in operation and maintenance (O&M) activities. The contractors are constantly encouraged to procure their construction material from local and small vendors. Small suppliers, predominantly civil contractors and transporters who help them in securing work contracts at nearby locations are being promoted and encouraged. Further, the Company has worked with the local communities and prepared check dams in the vicinity of villages to ensure water availability in the summer months and consequently increased the crop production.

Local procurement is done for items available in the local market to the extent possible. It is ensured that most of the manpower deployment is done from surrounding areas. As a part of CSR activities, local communities are trained and provided infrastructure for production of items which can be used by JSW (like betel nut plates). Skill development of nearby communities is also being carried out through Vocational Training Centre (VTC) to increase employability.

The Company organises training of farmers every year to improve the yield of crops of fruits and vegetables. The farmers are allowed to set up stalls at the Company canteen

and in the township to sell the fruits and vegetables grown by them. The Company has started a rural BPO to increase employment and create an earning opportunity.

JSWEL Vijayanagar The Company is promoting and encouraging surrounding areas local small suppliers, civil, housekeeping, horticulture contractors and transporters which help them in securing work contracts. We also encourage our contractors to involve the local people in Operation and Maintenance (O&M) activities. We also encourage the contractors to procure the construction materials from local and small Vendors.

The Company involves the local people right from the stage of the construction of the plants and we are providing apprenticeship to the ITI holders for their skill development and better employment opportunities.

The local contractors are being imparted with the best safety standard under contract safety management system thereby their capacity is enhanced to compete with their peers.

Local procurement is done for items available in local market to the extent possible. It is ensured that most of the manpower deployment is done from surrounding areas. As a part of CSR activities, local communities are trained and provided infrastructure for production of items which can be used by JSW (like plates from leaves of the betel nut plants). Skill development of nearby communities is also being carried out through Vocational Training Centre (VTC) to increase employability.

JSW Energy (Barmer) Limited is generating employment in horticulture and housekeeping work to the local manpower available. They are being given priority in housekeeping, horticulture contractors and transporters (like JCB, Dozer, dumpers, tractors etc.). We are providing technical and safety training in Plant KaushalVikas Kendra to the manpower working here, which makes them more reliable and employable in safe ways.

Information Sections:

Manufactured Capital, Page 56
Social and Relationship Capital, Page 64
Natural Capital, Page 66

Principle 3: Human Capital

1. Please indicate the total number of employees.

JSWEL Vijayanagar Ltd: 259, JSW Energy Barmer: 274, JSW Hydro Energy Ltd: 766, JSWEL Ratnagiri Ltd: 209, Others: 169 TOTAL:1677

2. Please indicate the total number of employees hired on temporary/ contractual/ casual basis.

JSWEL Vijayanagar Ltd: 554, JSW Energy Barmer: 717, JSW Hydro Energy Ltd: 546, JSWEL Ratnagiri Ltd: 775 TOTAL: 2592

3. Please indicate the number of permanent women employees.

JSWEL Vijayanagar Ltd: 11, JSW Energy Barmer: 3, JSW Hydro Energy Ltd: 19, JSWEL Ratnagiri Ltd: 24, Others: 18 TOTAL: 75

4. Please indicate the number of permanent employees with disabilities.

JSWEL Vijayanagar Ltd: 0, JSW Energy Barmer: 1, JSW Hydro Energy Ltd: 0, JSWEL Ratnagiri Ltd: 5

5. Do you have an employee association that is recognised by management?

JSWEL Vijayanagar Ltd: No, JSW Energy Ratnagiri : No, JSW Energy (Barmer) Limited: No, JSW Hydro Energy Ltd: Yes (Workers' Trade Union)

6. What percentage of your permanent employees is members of this recognised employee association?

Ratnagiri, Vijayanagar and Barmer: Not Applicable
JSW Hydro Energy Ltd: 66.5%

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

Ratnagiri, Vijayanagar, Barmer, JSW Hydro Energy Ltd : All Nil

	Category	No. of complaints filed during the financial year	No. of complaints pending as on end of the financial year
1	Child labour/forced labour/ involuntary labour	Nil	NA
2	Sexual harassment	Nil	NA
3	Discriminatory employment	Nil	NA

8. What percentage of your under mentioned employees were given safety and skill up-gradation training in the last year?

- Permanent Employees: 100%
- Permanent Women Employees: 100%
- Casual/ Temporary/ Contractual Employees: 100%
- Employees with Disabilities: 100%

JSW Energy Safety Performance:

	FY: 2019-20
Safety Training Manhours	
JSW Employees :	15,667
Contract Emp:	12,881
Total Manhours:	28,548
Fatal Cases	0
LTI Cases	3

Information Sections:
Human Capital, Page 60



Principle 4: Stakeholder Engagement

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

Yes. The stakeholders have been mapped and the key stakeholders are as follows:

- Government and regulatory authorities
- Investors and Shareholders
- Employees
- Customers
- Local Communities
- Suppliers/contractors.
- Lenders
- NGOs

There is a defined set of processes for interacting and engaging with various stakeholders at various levels. A Committee of the Board deals with the grievances and engage with the Investors and shareholders. Likewise, departments have been set up at Project locations for interacting and engaging with other stakeholders at various levels. The specialised teams ensure communication with various stakeholders internally and externally which helps the Company in understanding their concerns and respond to them appropriately.

2. Out of the above, has the company identified the disadvantaged, vulnerable & marginalised stakeholders.

Yes, among the stakeholder populace residing in DIZ, a baseline survey was conducted in project affected villages to identify the disadvantaged people. It forms the basis of the Company's CSR initiatives design to make it more focused towards improving life quality of villagers in general and women and marginalised in particular.

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

JSW Energy, Ratnagiri

The Company has taken following initiatives to engage with the disadvantaged, vulnerable and marginalised stakeholders:

- Three special-abled school identified, and company provides them material for physiotherapy exercise, development of physiotherapy room and sports material. Company organises stalls to sell materials made by Special-abled children as well as organises picnic for them every year.
- Company is helping 14 Aganwadi Kendras (170 students) in DIZ area by providing material like cub-boards, chairs etc.; doing thematic painting; training to AWC workers and also providing supplementary food.
- Company is helping 15 Primary schools (330 Students) in DIZ area by providing material like cub-boards, chairs, education software, doing wall painting; providing

BUSINESS RESPONSIBILITY REPORT

supplementary food. Company has constructed one school building and compound wall for one school. Company has given safety first-aid training to all teachers and safety training to 330 students in DIZ area. Company organises drawing competition for all school students.

- d) Company has started "ARMMAN" program "m-Mitra Phone Sakhi" programme for 279 pregnant & lactating women of DIZ & IIZ area. Counselling is provided to them via mobile phones and are regularly advised to go for health check-up through government PHC of Khandala and Malgund. every Monday and Thursdays. They also give support information to all pregnant women.
- e) Company has done renovation of Khandala PHC Operation Theatre, Labour room, and premises.

JSW Energy (Barmer) Limited

JSWEL has done the listing of each stakeholders and have a defined engagement plan as follows:

1. Engagement Plan with 'Local Communities' includes:
 - a) Implementing 'Need Based CSR Projects' across various themes, i.e. Health, Education, Skill Development, Livelihood Promotion, Basic Infrastructure Development, and Promotion of Local sports & culture (CSR Business Plan FY2019-20)
 - b) Operation of Women only RBPO to empower women.
 - c) Meeting with community people during field visit and interacting with them on day to day basis
 - d) Participating in social events/functions organised by the community
 - e) Organising and participating in targeted group level meetings, i.e. Women SHG meetings, school-teachers meeting, and Village Leader meetings, amongst others
 - f) Organising launch events of CSR projects, observing national festivals and important calendar events, i.e. Independence Day, and Republic Day, amongst others

JSW Hydro Energy Limited

To meet the prime motive of the Company's CSR philosophy, a comprehensive approach to improve the citizen services of providing

- safe drinking water and sanitation,
- public health,
- school and
- vocational/technical education is taken up since inception.

Besides this, two flag ship programs are initiated this year:

1. **CHARKHA** for empowering women through making them self-reliant and conserving traditional cultural heritage of the Kinnaur District.
2. **SHIKHAR** for promotion of boxing talent in the Kinnaur District.

Information Sections:

Social and Relationship Capital, Page 64
Sustainability Report, Page 40



2. Engagement Plan with 'Community Leaders' includes:
 - a) Meeting with them on one to one basis at office and during field visits
 - b) Addressing, at times, their genuine demands focused on development of whole community rather than individual
 - c) Facilitating and organising meetings from time to time of important community leaders meeting with senior management
3. Engagement Plan with 'NGOs' includes:
 - a) Providing opportunity to credible like-minded NGOs to partner with us and implement our CSR projects
 - b) Monthly review meetings with partner NGOs, implementing CSR Projects, to track progress and decide on next month's activity plan
 - c) Meeting with other local and state level NGOs to develop and maintain an amicable relationship and provide technical and other support, as and when needed

JSWEL Vijayanagar

JSWEL Vijayanagar has taken following initiatives to engage with the disadvantaged, vulnerable and marginalised stakeholders.

In association with JSW Foundation (a JSW group organisation) to promote rural livelihood especially women, activities have commenced to start a BPO at Bellary town which is about 30 kms from the Vijayanagar Plant. It is envisaged that the BPO would give employment to youth in the vicinity with main thrust on giving preference to females. The intent of commencing this BPO is that as there is not much employment avenues available in Bellary town, hence a CSR initiative of this kind would further JSW's mission of making a positive contribution to the society and enable in upliftment of standard of living of the surrounding areas of the industry. Activities are underway to create 300 seater BPO facility which can potentially create 750 jobs in its maximum capacity. The plan is to create 500 jobs in the 1st year and an additional 100 jobs in the 2nd year of this project & thereafter another 150 nos.

Principle 5: Human Rights

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

JSW Energy has formulated & circulated a policy on Prevention of Sexual Harassment at Workplace, Whistle-blower Policy, etc. It has also created an email id: energycare@jsw.in for collecting the grievances and their handling.

The Company has also extended strong support to associate manpower by covering them in Group Personal Accident & Group Medclaim policy. The Company abides by all the rules and regulations related to human rights which is applicable in the area of operations.

It covers everyone. JSW Energy has formulated & circulated a policy on Prevention of Sexual Harassment at Workplace, Whistle-blower Policy etc. It has also created an email id: energycare@jsw.in for collecting the grievances and their handling. The Company does not have a stated human rights policy. However, most of the aspects are covered in the manner in which the company conducts its business as well as in its human resources practices. All rules and regulations related to human rights which are applicable in the area of operations are abided by.

2. How many stakeholder complaints have been received in the past financial year and what percent was satisfactorily resolved by the management?

10 Number of complaints were received in FY2019-20 and all were resolved.

Information Sections:

Human Capital, Page 60



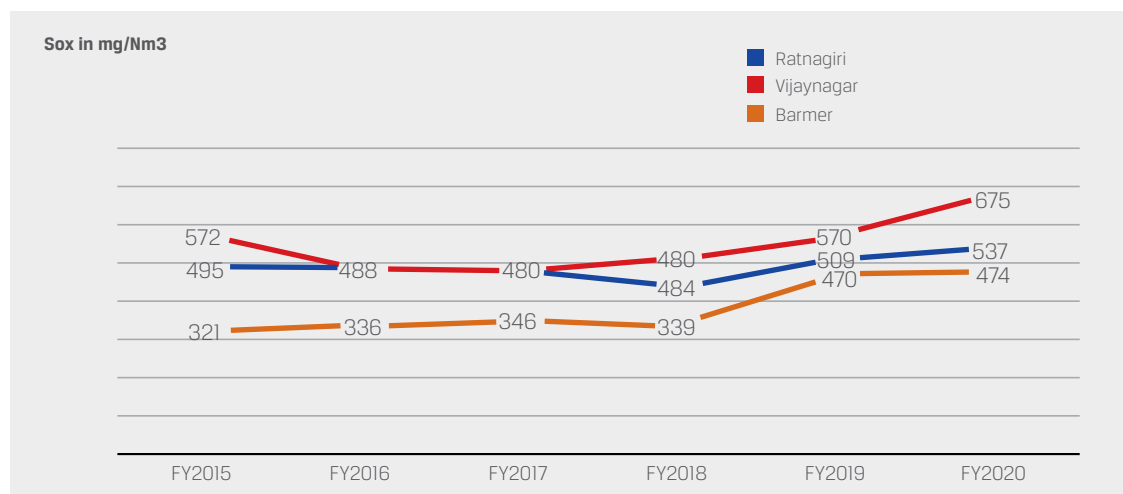
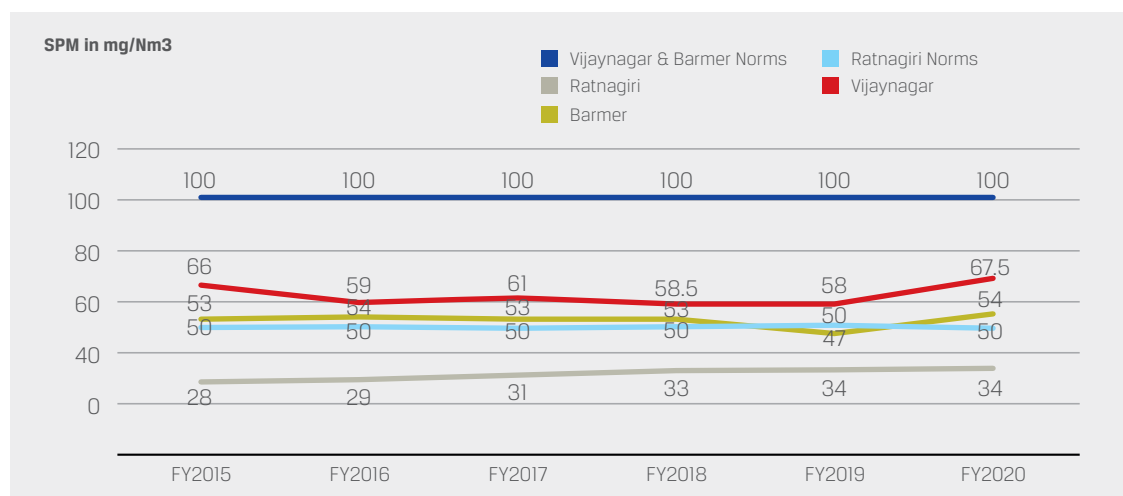
Principle 6: Energy and Environment

1. Does the policy related to Principle 6 cover only the company or extends to the Group/Joint Ventures/Suppliers/Contractors/NGOs/others.

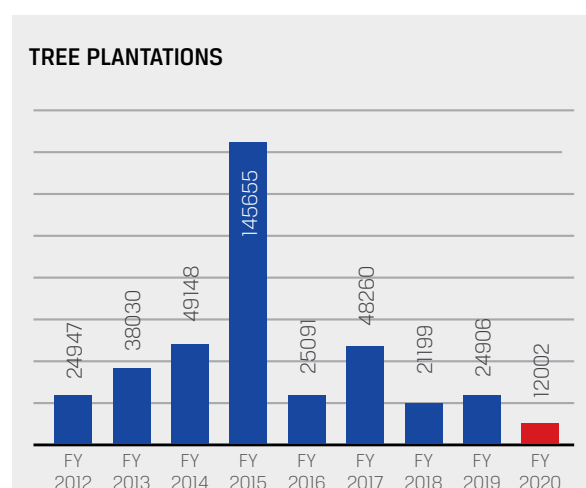
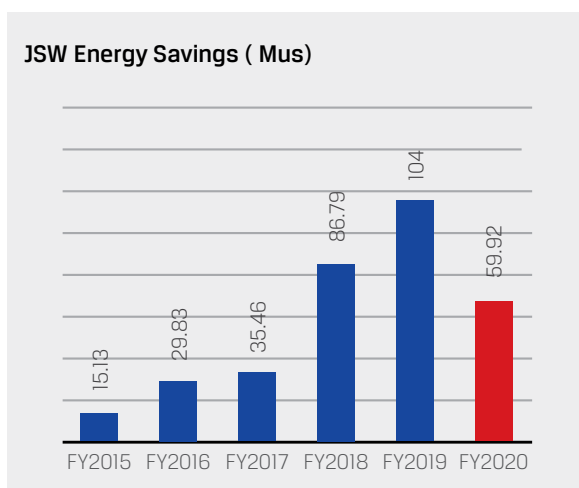
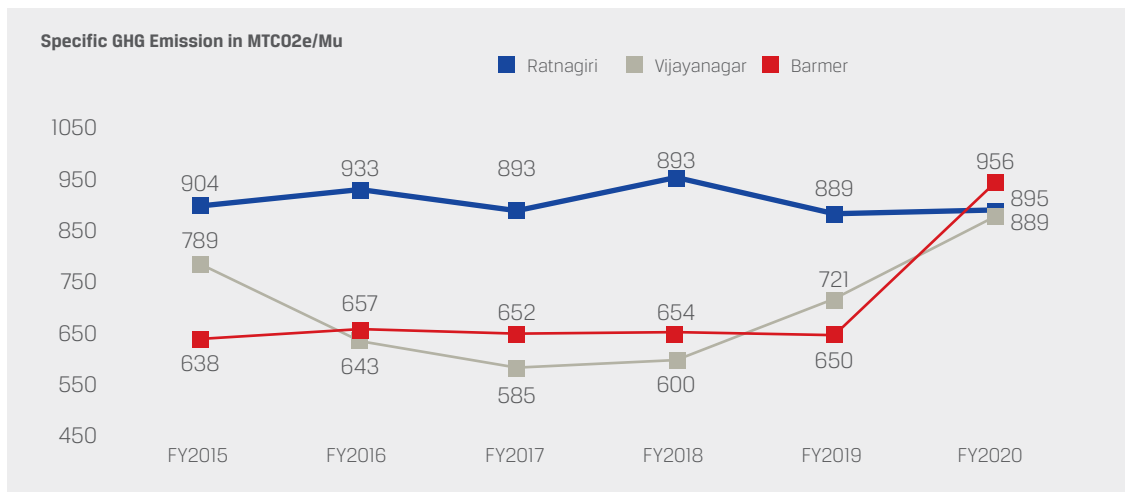
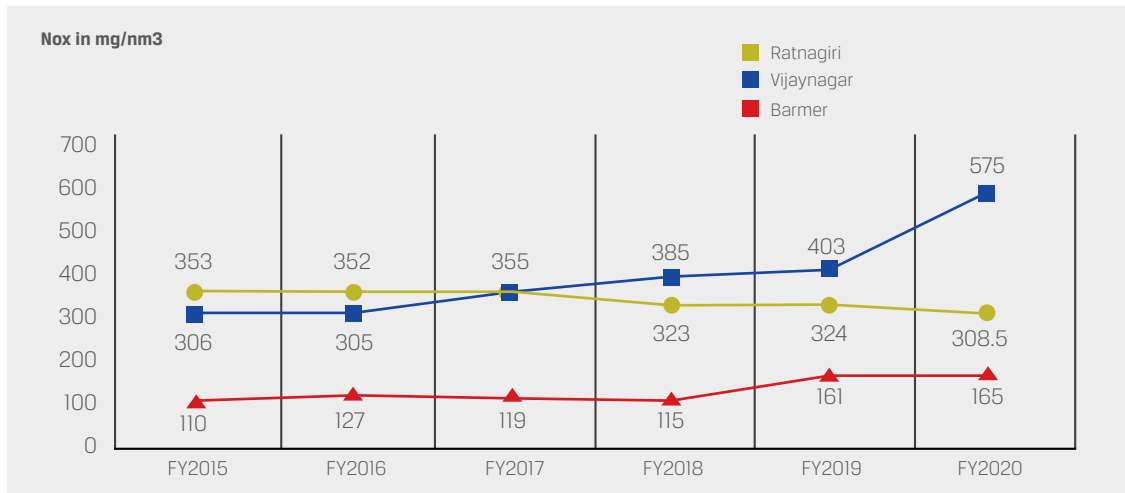
The scope of JSW Energy's Integrated Management Policy covers the conservation and preservation of the environment, and the entire value chain. In other words, the policy is applicable to Joint Ventures, suppliers, contractors, NGOs, and others. All the plants maintain the generation of emissions and waste within the permissible limits.

The Company has taken on the responsibility to address and tackle global long term challenges such as demographic change, climate change, and diminishing resources, in a socially, ecologically, and economically responsible manner.

A few glimpses of the environmental performance trends are provided in the following charts.



BUSINESS RESPONSIBILITY REPORT



2. 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.

JSW Energy has adopted an integrated approach to address global environmental issues such as climate change, global warming etc. Initiatives taken to make water available for operation of plants and community use and to address natural resource management, promotion of green belt and livelihood generation. Available lands around the sites and open spaces within the premises are being covered into green belts, leading to reduction of dust, reduction in evaporation losses of water, covered coal shed in coal stock yard and improved micro-climate conditions.

We have also initiated the process to set internal carbon price. We have engaged ERM (www.erm.com) to support developing the Internal Carbon Pricing (ICP) and work is underway. At present, we are reviewing and compiling the existing carbon pricing based on available regulations and trends, sectoral movements (low carbon transition vision, sectoral roadmaps, decarbonization etc). and anticipated future regulation, future projections for carbon pricing and reviewing the peers

Ratnagiri:

Following projects have been implemented in FY19-20 to reduce emissions and create a better environment around the plant

1. Replacement of basket for APH-A (Air Preheater) of Unit-1 resulted in saving of approx. 150 kW in ID Fan power consumption as well as improvement in boiler efficiency by 0.35%
2. Installation of trim sets in four BFP recirculation control valves to attend passing thereby saving 853 kW
3. The replacement of all CT (Cooling Tower) fans in Unit-2 with high efficiency fans having an aerofoil design resulted in saving of 4 kCal/kWh in heat rate through vacuum improvement

Vijayanagar:

Glimpse of actions taken during FY2019-20 are summarised below:

1. We have improved the emission standards, by changing the ESP fields spike type electrodes with spiral type electrodes and there by increased the availability of ESP fields and better SPM levels.
2. We have reduced the fossil fuel consumption by reduce the auxiliary power consumption by 62749KWh by carrying out various in-house operation/process improvements like Installation of VFD, ESP power consumption optimisation by changing the charge ratios, CEP header pressure reduction, part load equipment run hour optimisation which is a recurring saving on year on year, In line with this, Air flow optimisation in combustion and there by power consumption reduction in ID and FD fans, Primary air fans auto operation through PA header pressure, Air preheater baskets replacement and thereby reducing

the Differential pressure across Air pre heater and thus reducing the power consumption of ID and PA fans are being adopted for Auxiliary power consumption optimisation. In the Cooling Towers, the existing cross flute fills(6nos) replaced with Anti clogging hybrid trickle grid fills to avoid choking and improvement in condenser vacuum etc which had resulted in reduction in GHG emission.

JSW Hydro Energy Limited

The Plant addresses the environmental issues by the following activities:

1. Afforestation/Plantation drives
Compensatory Afforestation for both the power stations have been got carried out through Himachal Pradesh Forest Department. Over and above, plantation drives have been consistently taken up and in 2019-20 about 3708 new plantations (Robinia, Dreak, Popular, Neoja, Weeping Willow, Allanthus etc.) have been completed.
2. Single use plastic banned in the company premises
3. Implementation of solid waste management in the company premises

JSW Energy Barmer

Glimpse of actions taken during FY 2019-20 are summarised below:

1. We have reduced the fossil fuel consumption by reduce the auxiliary power consumption by 1.3% from normative by carrying out various in-house operation/process improvements like Installation of VFD in LP drip pump, ESP power consumption optimisation, CW running hour optimisation in winters, which had resulted in reduction in GHG emission.
2. Being a desert location, Rainwater harvesting being done at our plant.
3. Environment emissions are maintained within the norms. Limestone being dosed to maintain SOx emissions to minimum.
4. Helium leak detection test done to assess air ingress and thus improve condenser vacuum. The same leads to heat energy savings.

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

Yes, Potential environmental risks are identified by JSW Risk Management Department and discussed quarterly by the Directors of the Risk Committee. Once risk is identified, steps are taken to measure and mitigate risk through the Management System approach.

Both the plants under JSW Hydro Energy Ltd have detailed Environment Impact Assessment (EIA) and Environment Management Plan (EMP) in place. Both the EIA & EMP have been duly approved by the MoEF & CC (Ministry of Environment, Forest & Climate Change). Moreover, Disaster Management Plan (DMP) and Emergency Action Plan (EAP) have also been prepared and implemented for both the plants.

BUSINESS RESPONSIBILITY REPORT

4. 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?

Yes, both 1091 MW KarchamWangtoo (KWHPs) and 300 MW Baspa II are registered as a CDM projects. Process has been started to bring both the projects under VCS (Voluntary Carbon Standard) programme.

Environmental Compliance Report (Half-Yearly) is submitted to MOEF, Government of India for both the power stations. In addition, Environment Statement (Form-V) is submitted to Himachal Pradesh State Pollution Control Board annually.

5. 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.

The Company has undertaken the following initiatives on clean technology, energy efficiency and renewable energy. The salient points are summarised below:

Hydro power generation itself is considered as renewable source of energy. Since both the projects under JSW Hydro Energy Ltd are run-of-river hydro scheme, with no large pond and no emission of greenhouse gases, both helps in the sustainable development under clean development mechanism.

JSWEL Vijayanagar

At JSWEL Vijayanagar, lot of energy conservation drives were initiated and are listed as under:

Summary of APC - POG Activities in SBU-2 for FY2019-20

Unit	Date of implementation	Activity	Net Savings in kwh	Monetary Savings in INR lakhs
SBU 2	Apr-19	reduction of oil consumption during Cold start-up by adopting best operation practices like deaerator preheating/pegging, use of BF gas during unit start up (soaking, rolling parameter building) resulting of approximately 17KL/start up, total saving in FY 19-20 is 120KL	120KL	48.00
	Apr-19	Reduction of Start-up Auxiliary power from 85MWh to 45MWh for every cold start-up by optimising the equipment's in service	240	9.60
	Apr-19	Reduction of Auxiliary power nearly 172 KWh by optimisation of equipment running during the minimum export schedule, optimisation of total air flow with respect to % of Oxygen at APH inlet thereby reduction of power consumption in ID,FD and PA fans	172	42.65
	Oct-19	Reduction of Auxiliary power consumption 730KWh in ID and PA fans by replacement of APH baskets during opportunity shutdown	730	9.00
	Aug-19	improvement in cooling tower effectiveness by 7% by replacing the existing cross flute PVC CT fills with anti-clogging trickle grid fills in 06 Nos of CT cells	7% CT Effectiveness Improvement	330
SBU 1	Apr-19	Reduction of power consumption of 30Kwh in Instrument air compressor by running in suction throttle mode over Base mode	30	4.70
	Apr-19	Reduction of power consumption of 135kWh by switching OFF ESP hopper heater, shaft insulator heaters and rapping motors during reserve shutdown of unit	135	40.32
Savings in lakhs				475.28
Sustenance after implementing improvement projects in previous years				
SBU-2 Units 1&2	Apr-19	One BFP stop for unit part load operation (150 MW operation)	1200	234.89
	Apr-19	One CW Pump stop for unit part load operation (150 MW operation)	1480	269.86
	Apr-19	One BFP stop for unit part load operation (150 MW operation)	1200	53.33
	Apr-19	One CW Pump stop for unit part load operation (150 MW operation)	1480	66.13
	Apr-19	CEP header Pressure Optimization@ Part load(150 MW)	125	6.65
	Apr-19	CCW pump stop @150 MW load	275	1.485
	Apr-19	ESP mode changing from E to B	503	108.69
	Nov-18	Shut down unit - Shaft & support insulator Heater off	119	24.50
	Apr-19	Ash handling Specific power consumption (per optimization	35.42	10.89
Savings in lakhs				776.43
Total Savings in lakhs				1251.7

JSWEL Ratnagiri

1. Replacement of basket for APH-A (Air Preheater) of Unit-1 resulted in saving of approx. 150 kW in ID Fan power consumption as well as improvement in boiler efficiency by 0.35%
2. Installation of trim sets in four BFP recirculation control valves to attend passing thereby saving 853 kW
3. The replacement of all CT (Cooling Tower) fans in Unit-2 with high efficiency fans having an aerofoil design resulted in saving of 4 kCal/kWh in heat rate through vacuum improvement
4. Optimisation of PA Fan power consumption by reducing discharge header pressure thereby saving 954.3 kWh
5. Optimisation of ESP power consumption by changing charge ratio & hopper heater settings thereby saving 896.3 kWh
6. Optimisation of CEP power consumption by reducing discharge pressure thereby saving 826.6 kWh
7. Optimisation of CT Fan power consumption by optimising running hours as per condenser vacuum thereby saving 740.8 kWh
8. Optimisation of SWIP power consumption by optimising running hours thereby saving 679.5 kWh
9. Optimisation of Coal Mill power consumption by optimising number of running mills thereby saving 568.3 kWh
10. Optimisation of CW Pump power consumption by running common pump for two units at partial load thereby saving 1980 kWh
11. Reduction in Vacuum Pump-2B current by 10 Amps by replacing its damaged valve plates

JSW Hydro Energy Ltd

The Company has undertaken the following initiatives on clean technology, energy efficiency and renewable energy. The salient points are summarised below:

Hydro power generation itself is considered as renewable source of energy. Since both the projects under JSWHEL are run-of-river hydro scheme, with no large pond and no emission of greenhouse gases, both helps in the sustainable development under clean development mechanism.

Moreover, for energy efficiency following initiatives has been taken:

- Energy saving by replacement of inefficient lighting system by energy efficient LED lighting
- Constantly monitoring the performance of electrical equipment, DG sets etc
- Carryout energy audits at regular intervals to increase the efficiency of the plant equipment

A solar plant of 1.06 MWp capacity is planned to be installed this year at Sherpa Camp to further strengthen its commitment towards clean environment by focussing more on renewable.

A Mini Hydro is also planned at Karcham Dam to harness the environmental discharge to cater the captive consumption of the Karcham Project.

JSW Energy Barmer

1. Reduction of ID Fan Power Consumption by 181 KW in Boiler Area by providing Pneumatic Shutoff Valve in the vent line of slag cooler which in connecting to APH with investment of ₹ 0.96 lakhs in eight units.
2. Saving APC & system outage by removing RBF and feeding lignite through direct chute in secondary crusher house; Approx. Auxiliary power saving of 375 kwh/day with investment of ₹ 4 lakhs.
3. Instead of 3 CW Pumps only 2 CW Pumps are kept running in deep winter season and achieve design condenser vacuum; energy savings of approx.49920 Kwh without investment.
4. Stopping of CT Fans in Winter season(3 Fans / Unit); energy savings of approx. 29952 Kwh without investment.
5. Reduction in DM Water consumption by 48 T/day by rerouting condensate from VAM to Unit 3 & 7 Condensate Storage Tankwith investment of ₹ 2 Lakh.
6. APH Tube replacement done in Unit#2 (Energy savings - 2381 kW, Investment-₹ 2.27 Cr.), Unit#4(Energy savings - 588 kW, Investment ₹ 1.92 Cr.) and Unit#6(Energy savings -1041 kW Investment ₹ 1.35 Cr.).
7. Providing BED Burner cooling air supply from secondary air by interconnecting bed burner cooling air header and upper secondary air duct; energy savings of approx. 560 kW with investment of ₹ 4 Lakh.
8. Helium leak detection test done to assess air ingress and thus improve condenser vacuum. The same leads to heat energy savings
9. Monitoring of High heat drains after every shutdown/ start up to save energy.

6. Are the Emissions/Waste generated by the company within the permissible limits given by CPCB/SPCB for the financial year being reported?

Thermal Power Stations:

Yes, JSW Energy is in compliance with the prescribed permissible limits as per Central Pollution Control Board (CPCB), State Pollution Control Board (SPCB) for air emissions, effluent quality and discharge, solid and hazardous waste generation and disposal. Compliance reports/ statements are submitted to SPCB as well as Regional Office, Ministry of Environment, Forest & Climate Change (MoEF& CC) regularly, as applicable. However, we are finalising our action plan for the implementation of revised norms as prescribed by MoEF& CC.

Hydro Power Stations:

The plants neither produce any kind of gaseous emission, liquid, wastes, or solid wastes compared to other conventional mode of energy generation.

However, the river water quality is analyzed by the State Pollution Control Board as a part of environmental monitoring. No adverse effect of plant or its generation on river water has been found or reported.

7. Number of show cause/ legal notices received from CPCB/SPCB which are pending (i.e. not resolved to satisfaction) as on end of FY2019-20/

NIL

Information Sections:

Sustainability Report, Page 40
Natural Capital, Page 66

Principle 7: Policy Advocacy

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

The Company is member of various trade and chamber associations. The major ones are:

Confederation of Indian Industry (CII)

Federation of Indian Chambers of Commerce & Industries (FICCI)

The Associated Chambers of Commerce and Industry of India (ASSOCHAM)

Association of Power Producers (APP)

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

JSW Energy works closely with trade / industry associations in evolving policies that govern the functioning and regulations of Power Sector. The company participates in stakeholder consultation with Industry players and support the Government in framing policies in the following areas:

- Governance and administration
- Economic reforms
- Sustainable business principles
- Energy, water, and other natural resources
- Social and community development
- Coal mining and auction
- Transparency in public disclosure
- Non-conventional energy

Information Sections:

Social and Relationship Capital, Page 64

Principle 8: Community Development

1. Does the Company have specified programmes/ initiatives/projects in pursuit of the policy related to Principle 8? If yes details thereof.

Considering the remoteness and difficult conditions of the rural areas, programs have been designed to address the issues of literacy, women empowerment, drinking water and sanitation, public health in general and maternal and child health in particular. Creation and restoration of community infrastructures and improvement in farm productivity along with vocational skill development of rural youth is also undertaken to attain an overall improvement in quality of life of the people.

JSW Energy Barmer Limited involves in following CSR programs:

- a) Improving Living Conditions
- b) Promoting Social Development
- c) Addressing Social Inequalities
- d) Addressing Environmental Issues
- e) Preserving National Heritage
- f) Promotion of Sports
- g) Rural Development Projects
- h) Swachcha Bharat Abhiyan

JSW Energy Limited, Ratnagiri involves in following CSR programs

- a) Agriculture development
- b) Educational development
- c) Skill development and employability through vocational training
- d) Women empowerment through SHGs
- e) Preventive & curative health and sanitation, Biogas construction
- f) Watershed development

JSW Hydro Energy Limited, Sholtu involved in following CSR programs

- a) Improving living conditions
- b) Promoting social development
 - i. Skilling:- **"CHARKHA"** Initiative (Handlooms) for Women empowerment
 - ii. Agriculture and livelihood:-Creating awareness among the community of various govt. schemes through HAQDARSHAK.
 - iii. Education: - Promoting of digital learning.
- c) Ensuring environmental sustainability-
 - i. Drinking Water supply scheme.,
 - ii. Plantation works

- d) Promotion of Sports development under **"SHIKHAR"** Initiative.
- Providing boxing rings and equipment.
 - Deployment of boxing coaches.
 - Sponsorship and scholarship for the trainees.
 - Construction of High Altitude Boxing enclosures.

JSW Energy Vijayanagar

Yes, JSW Energy Ltd considers its economic, environmental, and social responsibility to foster sustainable development as well as add value to the local community in which it operates. The policies which support this principle are Sustainability, Environment and Community Relations (CSR) policies. The programs/initiatives are majorly embedded from a CSR perspective.

The summary of Key programs/initiatives are

- Improving Living Conditions
- Promoting Social Development
- Rural Development Projects

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

All these programs, at different plant locations are run both through in-house independent teams, own foundation (JSW Foundation) and also in collaboration through NGO's/ Government structures etc.

3. Have you done any impact assessment of your initiative?

Most of the projects and initiatives run into a few years and the impacts of the activities will be measurable after project completion or later. However, tools are in place to assess the impact of the various community interventions. Also, the Company conducts periodic assessment of its work through a third party and incorporate its recommendations in alignment of our program. Last assessment was conducted in year 2016 through Institute of Development Studies, Jaipur.

This year Ratnagiri plant has done an impact assessment from an external agency.

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

Vijayanagar : INR 2.1 cr

Ratnagiri: INR 4.0 cr

Barmer: INR 6.06 cr

JSW Hydro : INR 3.45 cr

Total = INR 15.61 cr

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

Identification and prioritization of community initiatives is done through participatory exercise at village level which is further endorsed by Gram Panchayats. Implementation of mutually agreed interventions is done in participation of PRI members and community volunteers including women stakeholders; therefore, they are well received by the end user and further maintained by the community and Gram Panchayats.

JSW Energy, Ratnagiri

The Company organises training of farmers every year to improve the yield of crops, vegetables, and fruits. The Company allows them to set up stalls at the Company canteen and in the township to sell the fruits and vegetables. The Company has started a rural BPO to increase the employment and earnings. JSWEL has arranged for courses on fashion designing in the DIZ area for women; this entails minimum fees and provides stitching business to them. About 40 girls are being trained in fashion designing every year.



1) Haldi kumkum programme at Jayvinayak temple

With the theme of entrepreneurship, we have organised a haldi kum kum is a social gathering programme for panchkroshi women and distributed a small gift to women which is prepared by bachat gat – shell craft products & silk jewelers. We create awareness about home based models like shell craft, silk jewelers and stitching cloth bags which increase the earning of women. Total 1154 women participated.



BUSINESS RESPONSIBILITY REPORT

2) Special village Health check-up camps

To improve access of Below Poverty Line (BPL) and Above Poverty Line (APL) families to quality medical care for identified specialty services requiring hospitalisation for surgeries and therapies or consultations through an identified Network of health care providers. With the collaboration of Lotlikar Hospital Ratnagiri and JSW Energy Ltd. we had organised Village health check-up camps at Jaigad Panchkroshi villages. In this camp ECG, BP, Random Sugar and general check-up have been done. Total 616 patients attended the camp and 151 patients referred to further check-up at Lotlikar Hospital Ratnagiri and 28 people angiography as save 60 local community Zihla Parisad and panchayat member addressed the villagers about various government schemes related to health.



3) Educational Initiatives

Launched table byheart program this year and there is a significant improvement recorded at 98% as against 25%. We have spent ₹1.5 crore for Jaigad High School for build big infrastructure in DIZ area. We have also contributed towards the repairs of school roofs.



4) Sports

20th Maharashtra State Karate Competition: 17 students of JSW Sports Academy- Jaigad High School had participated in 20th Maharashtra State level karate competition held at Alibag, Raigad on 27th January 2019. They won 1 Gold, 10 Silver & 32 Bronze Medals.

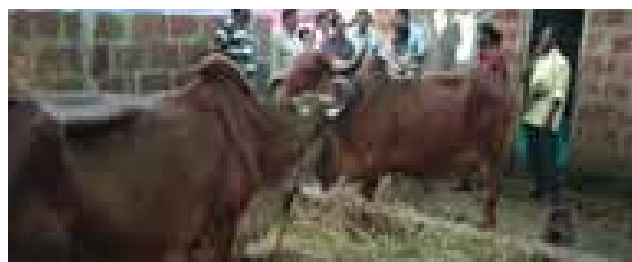
We have felicitated the sport students with the presence of Electrical HOD- Mr. Paramjit Singh.



5) Organic Farming

To create awareness about organic food, impart skills and motivate farmers towards organic farming we have given organic farming training to farmers. Farmers are well accepted this activity and moving towards organic farming. In DIZ area one farmers group formed under society act (28 members). Farmers had conducted monthly meeting at farmer's farm and discussed about various issues, successful farming stories, etc. He also started an organic vegetable stall twice in a week since December 2018.

- 8 nos of shadenet installed 32 lakh subsidy brought from government
- exotic vegetable production is started
- 30 gir cow livestock developed
- 50 farmers train in organic farming



JSW Energy, Barmer

Detail of various programs implemented is as below:

Health, Nutrition & Sanitation	
Running of ambulance	Coverage - 4 villages of DIZ. Patient benefitted-329.
MAM Project	<p>Project started in: Sept. 2019</p> <ol style="list-style-type: none"> 1. Distribution of Spirulina to 1045 children of 34 AWCs. 2. Provided weighing machine (adult & baby weighing machine), Height scale, learning charts (set of eight charts) & dari to 34 Anganwari centers. 3. Plantation of medicinal plants at Anganwari centers (5-5 plants of Lemon, Drumstick & Curry Neem at each AWC). 4. Wall painting at 10 Anganwari Centers. 5. Awareness generation through meeting with villagers & PRIs.



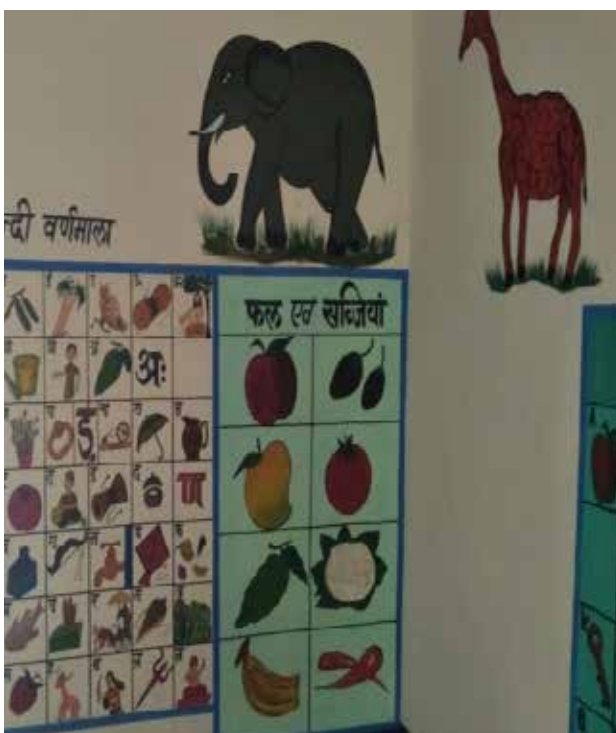
BUSINESS RESPONSIBILITY REPORT

Safe Drinking Water And RWH Projects

Water supply to DIZ	Supply of drinking water to 448 households of 4 villages of DIZ on regular basis.
Installation of handpumps	Installation of 24 handpumps (19 successful) in Dhanora, Thado ki dani, Lunu Kala, Vishala Agor, Satal, Bhakhari, Gudisar, Jalipa, Derasar Chuli, Bola, Jalipa, Bhadresh, Vishala, Sura, Dudaberi, Sura Charnaan, Jasai, Juna patrasar, Balera, Undkha, Ranigaon, Balao, Maroodi, Naand, Aanti villages of Barmer block.

**Education**

Computer teacher to GSSS Bhadresh	Support for one computer teacher at GSSS, Bhadresh is provided by JSW. Aprox. 250 students benefitted through the initiative.
Udaan scholarship	Total Application received- 242. Total students benefitted 33. Coverage - Barmer district. B.E./B. Tech-2, Diploma/Certificate-2, ITI-2, Post graduate-1, Under graduate-26.



Livelihood And Skill Training Programs	
Garment center	Project start date: Dec. 2019 25 women of 7 villages (Bhadresh, Kamoipura, Chuli, Adarsh chuli, Jalipa Agor, Rohilli, Barmer) engaged in the project. Production : shirts- 295, Pants- 9, Kurti-60. Total earning - ₹ 27280/-.
Running of computer and tailoring center	Location - 2 villages (Bhadresh & Ishwarpura village) Trained through Computer center- 96 Trained through Tailoring center- 72
Paper Recycling unit	Project started in: July 2019 6 persons from 4 villages of DIZ (Bhadresh Gandhav, Punasia, Kamoipura, Ishwarpura) is engaged in the project. Production: File- 3500, Folder-2100, Notepads-2075, Carry bags- 1075 Total earnings: ₹ 318010/-
Handicraft Production Centre	Project started in: Nov. 2019 Females of Bishala & Bhadresh Gram Panchayats are engaged in the project. Trades : Applique work & Mukka embroidery
Rural Women BPO	Project started in: Oct. 2019 56 females of 9 villages (Bhadresh Gandhav, Punasia, Chuli, Jalipa Agor, Chak Dholka, Kapuradi, Bhothiya, Jalipa, Barmer) are engaged.
Skill School Barmer	Project started in: Sept. 2019 Trades & coverage: 1. Customer care executive - 50 trainees (25*2) 2. Domestic data entry operator - 60 trainees (30*2)



BUSINESS RESPONSIBILITY REPORT

EVIORNMENT PROTECTION

Greening of Bhadresh project	This year plantation done 1470 saplings at village community places, schools, temples & roads.
Silvi pasture project	<p>Total sites-4, Total land- 180 Bigha, Total Plantation-3000.</p> <p>Plants type-Neem, Kumbhat, Khejari, Ardu, Ber, Siras.</p> <ol style="list-style-type: none"> 1. Chuli (near Nagnechiya mata temple) 2. Bishala (near Goushala) 3. Santal Bhakhari 4. Bishala (near Temple)



Basic Infrastructre Development & Sanitation

Construction of library hall	Construction of 2 hall size 5*10 mtr each & one toilet block at Ishwarpura village.
Installation of solar street lights	Installation of 138 solar street lights at 10 villages (Bhadresh Gandhav, Punasia, Kamoipura, Ishwarpura, Bishala, Chuili, Adarsh Chuli, Dhanora, Gudisar, Shivpura).
Construction of toilets	Construction of 61 toilets in Bhadresh, Bishala & chuli villages.

JSW Energy Vijayanagar

Yes, JSW Energy Ltd endeavors to have maximum community participation in CR initiatives, as CR initiatives are implemented based on a collaborative and participatory approach. All initiatives are designed to empower the communities through knowledge transfer and trainings to sustain the project after completion. Regular Interactions with local community are carried out to ascertain and identify the needs and accordingly plans are prepared to address those needs.

JSW Energy Ltd considers its economic, environmental and social responsibility to foster sustainable development as well as add value to the local community in which it operates. The policies which support this principle are Sustainability, Environment and Community Relations (CSR) policies. The programs/initiatives are majorly embedded from a CSR perspective.

The summary of Key programs/initiatives are:

1) Improving Living Conditions

- a) Health Camp organised at Rajapura Village of Sandur Taluk for the residents of Rajapura, Timlapura and Mallapura, more than 5000 villagers are benefitted



2) Promoting Social Development

- a) Organised Sports activity for villagers of Kodalu, Sandur Taluk – KABADDI sports activity for the villagers of Kodalu, Chikantapura and Doddantapura around 50 persons with 5 teams participated and villagers from in and around Kodalu came in huge numbers to cheer their teams

3) Rural Development Projects

- a) Water pipeline and water facility for Girl's Toilet at Govt. School, Rajapura Village, Sandur Taluk- benefitted around 150 Girl students of the school

Rajapura, Mallapura, Timlapura, and Kodalu all fall under DIZ villages of our plant.

JSW Hydro Energy Sholtu

1. Promoting Social Development

- a) Women empowerment through training on Handloom (CHARKHA): To make the women of the area self sustainable, Ten handloom training centres and one vocational training center are being run in various gram panchayats of DIZ under our theme "CHARKHA". In these centres, 100 women are being provided training, for one year, through professional trainers.

Health Check Up and Awareness Programmes are also being conducted for the women of these training centres.



Handloom Training Centres



Health Check Up

BUSINESS RESPONSIBILITY REPORT

- b) Opening of Vocational Training Centre (VTC) at Sholtu:** A Vocational Training Centre has been brought under operation at Sholtu. This VTC is working for the women residing in the vicinity of Sholtu Camp area. It is being operated under our direct monitoring and professional guidance.



- c) Sale of Handloom Products:** The handloom products being prepared by the women are being sold by establishing sale centres at various local fairs and festivals. A sale centre has been established at National Highway near Karcham Dam for sale of these products. The products are also linked with AMAZON.



- d) Creating awareness of various state and central Govt. Schemes in the Community and getting them connected:** JSW Foundation is spreading awareness among the community of this area regarding the ongoing welfare Govt schemes. This responsibility is given to an expertised agency M/S Haqdarshak Empowerment Solution Private Limited. In the first stage, this program was started in Eight (08) Gram Panchayats Total 5000 applications have been submitted for the linkage with the schemes and till date 2803 have received benefits.



- e) Establishing E-Learning program:** Established digital learning programs in 16 Schools of the area. It consists of hardware material like Projector, White board, Computer, UPS, Cabinet, Speaker and software material in Hindi and English medium covering the topics of HP Board and CBSE stream. It consists of hardware material like Projector, White board, Computer, UPS, Cabinet, Speaker and software material in Hindi and English medium covering the topics of HP Board and CBSE stream. Benefitting 2426 Numbers of students in a year.



2. Addressing Environmental Issues

- a) **Drinking Water Supply Scheme:** Drinking water scheme provided to Jani village. It consists of 5200-meter underground pipeline with intermediate chambers benefitting a population of 725 nos.



- b) Mass Plantation Drives:** JSW Hydro Energy has initiated the mass plantation drives being conducted in and around the location. Under these drives saplings of various species like Deodaar, Weeping willow, Rubinia, Baan, Chilgoza, Silver Oak etc are being planted with local community and employees participation. In the FY 2019-20, around 4000 saplings have been planted. A special team has been deputed for the maintenance of these saplings.



BUSINESS RESPONSIBILITY REPORT

3. Promotion and Sports Development (SHIKHAR): To enhance the boxing skill in the area, following activities have been done under the Theme SHIKHAR:

- Installation of 06 boxing rings and providing best quality boxing equipment's
- Deployment of full time highly skilled boxing coach
- Providing nutritious diets to all trainees at 7 locations
- Construction of 02 boxing enclosures (phase-I)
- Sponsored a Youth Men and Women State Boxing Tournament and a Senior & Sub Junior Girls State Boxing Tournament
- Provided honorarium to prominent Boxers



Installation of boxing rings



Regular training on boxing at various locations

It is the due to regular trainings that since our interventions, the boxers are enabled to participate even in various district, state, national and even international level and win medals. The details of medal won are as follows:

S.No.	Medals	District	State	National	International	Total
1	Gold	33	75	6	1	115
2	Silver	19	27	5	1	52
3	Bronze	18	30	8	1	57
Total		70	132	19	3	224



Gold in KHELO INDIA 2020



Gold in international Championship, Bhutan



Honorarium being distributed to prominent boxers



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Principle 9: Community Development

1. What percentage of customer complaints/consumer cases are pending as on the end of financial year?

NIL

2. 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)

N.A.

3. 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 five years and pending as on end of financial year? If so, provide details thereof, in about 50 words or so.

NIL

4. Did your company carry out any consumer survey/ consumer satisfaction trends?

Since the business primarily is with customers from Govt entities, with whom the company continuously engages / interacts, no formal survey has been done.

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