

# KIRLOSKAR OIL ENGINES LIMITED

A Kirloskar Group Company



Enriching Lives

## CORPORATE SUSTAINABILITY REPORT 2017-18



## THE ENGINE FOR SUSTAINABLE GROWTH



# ABOUT THE REPORT

## 7<sup>th</sup> Corporate Sustainability Report

REPORTING PERIOD	01 April 2017 to 31 March 2018
PERIOD OF FINANCIAL DISCLOSURES	01 April 2017 to 31 March 2018
IN ACCORDANCE WITH	GRI Standards reporting framework
OTHER GUIDELINES FOLLOWED	<ul style="list-style-type: none"><li>• National Voluntary Guideline (NVG) by MCA, GoI</li><li>• United Nations Global Compact (UNGC)</li><li>• Sustainable Development Goals (SDGs) of the United Nations</li></ul>

Changes: There are no significant changes to the organisation and its supply chain. The Rajkot and Bhare plants are kept out of this report’s boundary, along with the international operations (KOEL Americas, LGM). [\(GRI 102-10, 45\)](#)

Restatements: Nil

Date of most recent report: March 20, 2018 [\(GRI 102-51\)](#)

Reporting Cycle: Annual

### Location of the Headquarters:

Kirloskar Oil Engines Ltd., Laxmanrao Kirloskar Road, Khadki, Pune-411003, Maharashtra, India

*We invite comments, queries and suggestions from each and every stakeholder. Write to us at [sustainability@kirloskar.com](mailto:sustainability@kirloskar.com)*

### About the cover page of the report

The cover shows tress with fruits of UN SDGs. The trees represents the sustainability vision of the KOEL. The branches of trees show the various initiatives taken by KOEL in addressing the material issues. With these efforts, KOEL intends to contribute to the UN Sustainable Development Goals (SDGs), which are shows as the fruits of tree.






# WELCOME TO KOEL’S 7<sup>th</sup> SUSTAINABILITY REPORT 2017-18


(GRI 102-1, 201-3, 201-50, 102-51, 102-52)

Kirloskar Oil Engines Limited (KOEL or the Company) is a leading engineering conglomerate manufacturing internal combustion engines, generating sets and parts, which are used for various applications, such as agriculture, industrial, stationary power plants and construction equipment. The Company specializes in the manufacture of both air-cooled and liquid-cooled diesel engines and generating sets across a range of power output from 5 kilo-volt-ampere (kVA) to 1,010 kVA. KOEL offers engines operating on alternative fuels, such as bio-diesel, natural gas, biogas and straight vegetable oil (SVO). In keeping with the Company’s commitment to responsibility and accountability towards all its stakeholders, KOEL is pleased to present its seventh sustainability report, since they began reporting in 2009-10. With their Sustainable Operational Excellence Strategy, they are going to present the progress made during the year 2017-18 by emphasizing on their major 8 focus and overarching principles.


## Eight focus areas




*Sustainable supply chain*




*Human capital development*




*Climate Stewardship*




*Product stewardship*




*Innovation management*



*Strategy for new markets*



*Operational eco-efficiency*



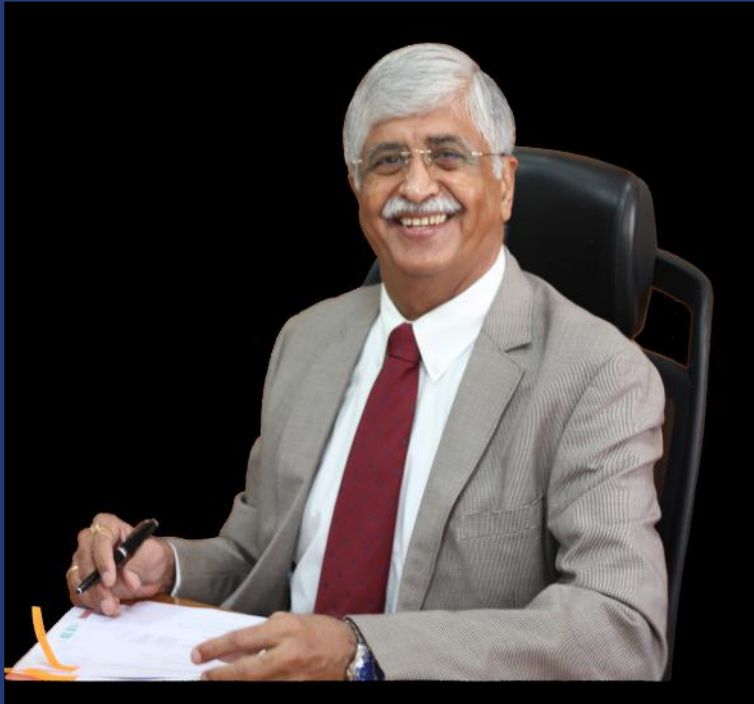
*Public policy*

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# MESSAGE FROM THE JOINT MANAGING DIRECTOR



Dear Reader

I welcome you to the KOEL's Seventh Sustainability Report covering KOEL's sustainability performance 2017-18, which is in the line with Global Reporting Initiative (GRI) Standards and is independently assured in accordance with – 'the Core Option' level disclosure.

This report is an endeavor to bring to you KOEL's performance on Economic, Environmental and Social aspects during the reporting period of 1 Apr 2017- 31 Mar 2018. As a responsible business, we are committed to United Nations Sustainable Development Goals (UNSDGs) – particularly the ones dealing with supporting Energy Access, Affordability and Reliability. Accordingly, in this report, we have also presented our performance on SDGs.

We consider this report as an important landmark in our corporate journey as we seek to enlarge the horizon of our accountability and enable our stakeholders better understand the strengths that KOEL is endowed with for delivering all-around value. The reporting was a year of solid growth for KOEL. Despite an extremely

challenging microeconomic environment, we achieved excellent sales growth. KOEL has posted its highest net sales of ₹ 2,803 crores as compared to the previous fiscal year of ₹ 2,614 crores. We focus on continuous value addition to all our stakeholders, new markets and communities through the culture of innovation, good governance and developing strong organizational capabilities to deliver economic and technological solutions with higher barrier addressing the unique challenges of Indian and international markets.

We have been going through a major transformation over the past years and it is not easy to assess the transformation impact from one single year's results, but when looking back, it becomes clear just how much has changed. The immense hard work of our employees summed it towards higher performance and collective strength to our company. Our teams feel engaged and empowered to always do better and push our shared ambitions to greater heights. Our transformation journey will continue to build from what we have been achieving.

The 2017-18, came out to be a good business year for Industrial Engine Business (IEB). For the first time, we have developed and successfully installed high horse power (HHP) Industrial engine application for firefighting pump sets. And as a part of customer engagement programs, the Industrial Engines Business conducted platinum Original Equipment Manufacturer (OEM) meets in 2017-18 at our Kagal manufacturing plant. This facilitated meaningful exchange between the key personnel of the Company and OEM. This event helped us in enhancing our customers' confidence and strengthen our partnerships further. For the industrial engine business, there was a good traction seen in the industrial segment especially in the construction equipment segment.

For the industrial engine business, there was a good traction seen in the industrial segment especially in the construction equipment segment. In 2017-18, KOEL's Industrial Business has been awarded "Strategic and Long-Term Partner" for excavator segment by Hyundai Construction Equipment Private Limited and for the second consecutive year, KOEL Industrial business has been awarded 'Excellence on Sustained performance and Timely Delivery' by Sany India Private Limited.

At KOEL, we are committed to optimizing the use of energy in operations and also bring about continuous improvements in the efficiency of processes and products through use of energy efficient and renewable energy technologies. Regarding this, in 2017-18, we took some steps to conserve energy and to take accountability of its impacts. Few of the steps taken in our Khadki plant were by installing energy efficient LED lights, installation of occupancy sensors for toilets, organized lectures on "ENCON at work place and at home and Energy Auditing" etc.



At KOEL, we take total responsibility for our carbon footprints and we adhere ourselves to take necessary measures for the accounting and offsetting same to the extent possible. In 2017-18, total carbon emission has been calculated and trend for same is tracked for last 3 years. Even though overall total BHP increased by 14.15%, the overall increase in total tons of CO2 emission over previous year is only 13.75%. The manufacturing facility at Kagal has shown 3.77% reduction in Specific CO2 emissions compared to year FY16-17. This positive impact is a result of renewable energy purchase through open access.

On the other hand, KOEL's CSR team created its own footprint through its CSR programmes. With a budget of ₹ 4.36 crores for 2017-18, KOEL's CSR team touched the four major focus areas of CSR namely Rural development, Health, Environment and Education with spending ₹ 4.05 crores on education and benefiting more than 30,000 beneficiaries overall in 2017-18.

The Company strongly believes in 'Enriching Lives' of the people surrounding the communities in which it operates. One of the biggest KOEL's CSR highlight is Sanvedna- HIV/AIDS awareness program. This is consecutive sixth year of Sanvedana HIV awareness program. HIV awareness rally was conducted on 1st December 2017 on the occasion of World AIDS Day. This year awareness program and voluntary testing programs was conducted for the migrant labours, the target groups and the people from hilly area of Kolhapur district. This programme impacted the decline of HIV infection rate from 4.48% in 2014 to 0.9 % in 2018 in Kolhapur district. Kirloskar Oil Engines Ltd. is first company in Maharashtra, which is consecutively working on this vulnerable health issue. MSACS (Maharashtra State AIDS Control Society) and NACO (National AIDS Control Organization) have appreciated this CSR initiative.

KOEL CSR team has contributed in improving the village development project which was initiated last year. We extended our community development practices by extending the initiative's reach beyond the communities around the Plants. Under these initiatives one tribal community (Kerle Dhangarwada) has been selected from Kolhapur District. The baseline survey was conducted with the help of NGO to find out the needs of the community. According to the needs, initiatives like health check-up camps, educational help, library and sports material support, improved vegetable seeds distribution, manure making training were conducted. The nomadic tribes community from Dehu Fata has been selected for its development. KOEL CSR Team have started extra classes for the school children, as a result of which, 5 school dropout children have restarted their schooling. One library is started for them, group reading practice is going on to develop their reading habit. Nasik Plant has extended its CSR scope for the tribal village Gajarwadi (near Trimbakeshwar, Nasik). E-Learning Computer System (K-Yan) has been provided to primary school which is enabling tribal school children to improve their computer literacy.

In 2017-18, KOEL's Human Resource brought immense pride and dignity with permanent female employee base of 147% in 2017-18 in comparable with 82% in 2016-17. We will continue to engage employees on various platforms and enabling each of them to see career progressions, in the process of contributing to the company's growth.

We continue to engage suppliers and customers through various new initiatives. We believe that stakeholder engagement and partnerships are critical to define, generate, distribute and retain value and I look forward to your support in improving sustainability of our business.

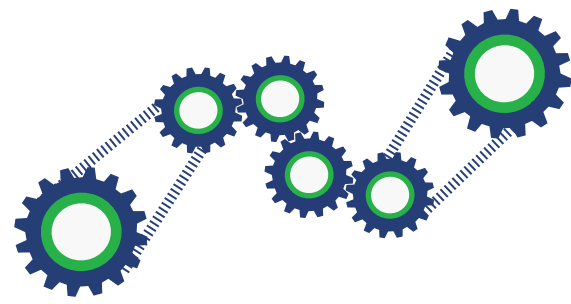
You will observe from this report that we have made significant progress since our fourth report. Our sustainability roadmap over the next three years will focus on the expectations of our key stakeholders including our employees and have defined strategies to be more economically, socially and environmentally beneficial and impacting the triple bottom line viz. people, planet and profit.

The report provides comprehensive listing of actions taken by us along with results achieved. I look forward to receiving your valued feedback on the report that will help us further in this sustainability journey.

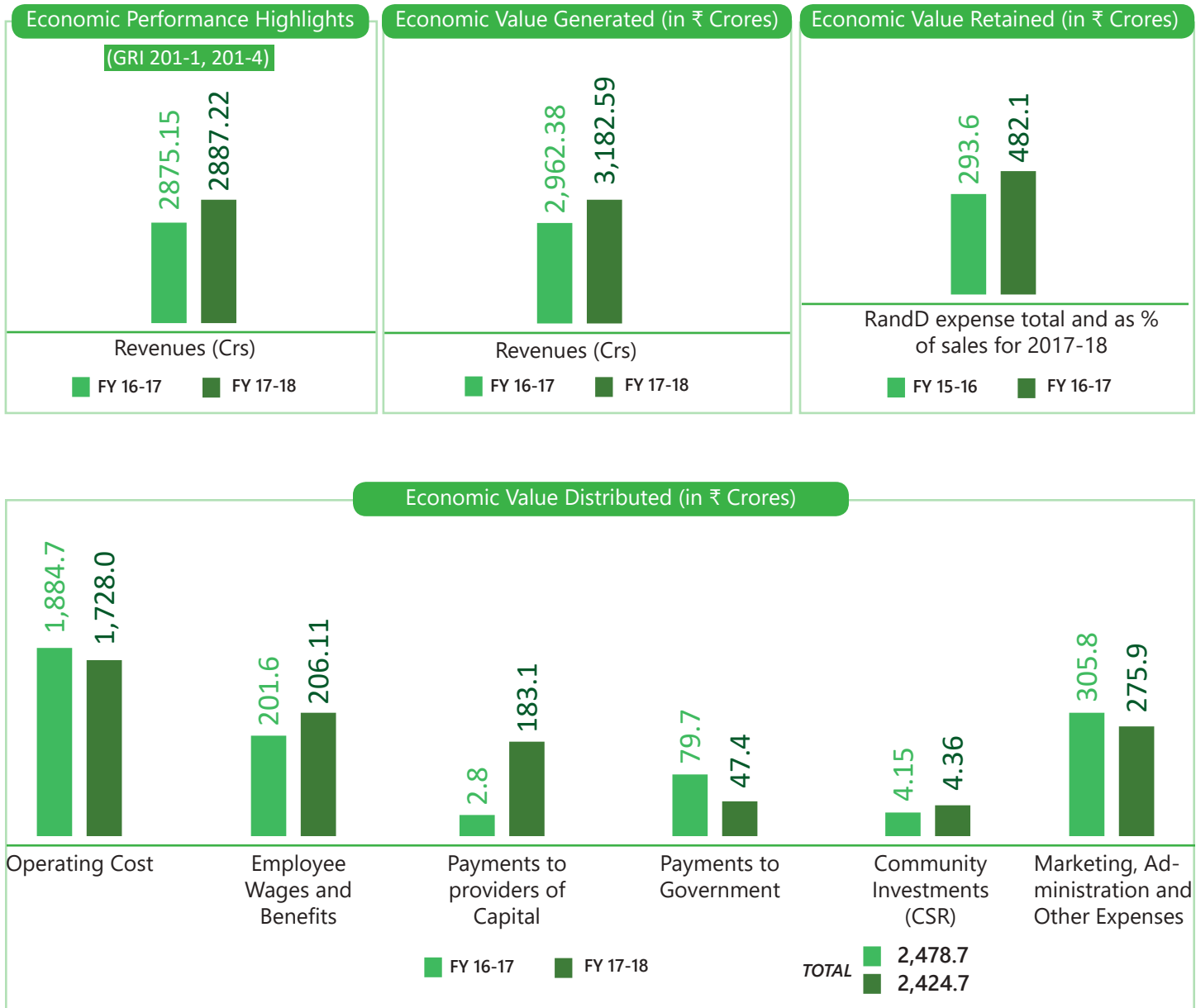
Happy reading!

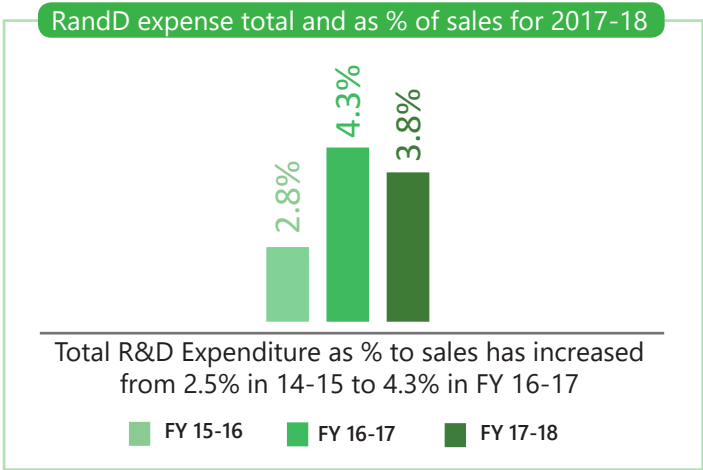
**Mr. Rajendra R. Deshpande**

# 1 PERFORMANCE SNAPSHOTS



## Economic Performance Highlights



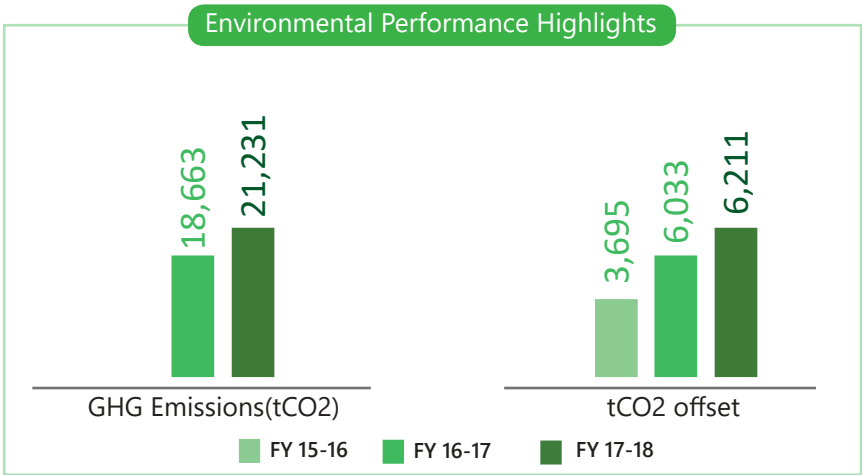


Eligible incentive ₹ 0.85 Cr, export incentive ₹ 4.81 Cr were received from the Government for the promotion of exports.

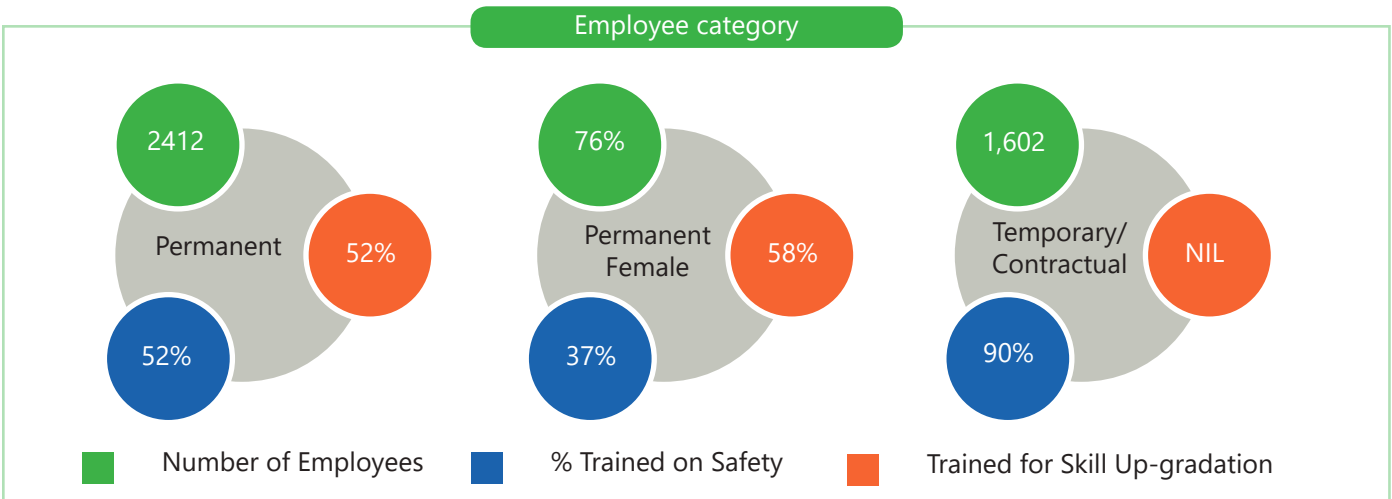
(GRI 204-1)

Proportion of spending on local suppliers > 82% (within 300 km, as per Supply Chain Policy) and only 2% suppliers are overseas based.

Environmental Performance Highlights

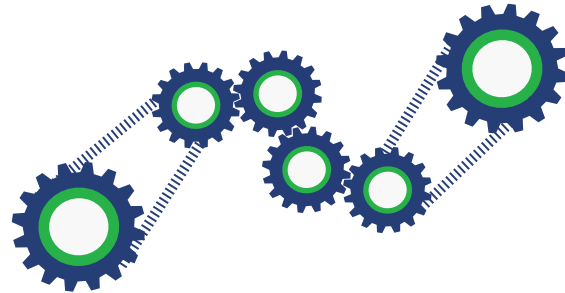


Social Performance Highlights





# 2 OUR FOOTPRINT



(GRI 102-6, 5, 7, 10)

KOEL is listed both on the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). Despite increasing competition, decreasing margins and challenging macroeconomic situation, the company was able to post highest ever net sales of Rs. 2804 Crore. In order to further consolidate KOEL's position in diesel and electric pump segment, the company went into a strategic acquisition exercise by purchasing 100% equity shares of La-Gajjar Machineries Pvt. Ltd., based out of Ahmedabad, Gujarat, India, with two established brands 'Varuna' and 'Raindrop'.

Paid up Capital	₹ 28.92 Crores
Total Turnover	₹ 2,804 Crores
Total Profit After tax	₹ 150 Crores

## Manufacturing Locations and Field Offices:

Manufacturing Location	Business Groups	Activity
Pune	All business groups	Corporate functions, Sales and Marketing and RandE
Kagal	<ul style="list-style-type: none"> <li>• Agri</li> <li>• Industrial</li> <li>• PGBG</li> <li>• Export</li> </ul>	<ul style="list-style-type: none"> <li>• Engines and Gensets manufacturing</li> <li>• Spares warehouse</li> <li>• Manufacturing of farm mechanization equipments</li> </ul>
Nashik	LEBG	<ul style="list-style-type: none"> <li>• Large Engines and Gensets manufacturing</li> <li>• Spares warehouse</li> </ul>
Bhare		Gensets and Pumpsets

Field Offices	Cater of Business Groups	Location
Regional and area offices	All business groups	State Capitals in India
Overseas offices	-	Kenya, Nigeria, South Africa, Dubai, Indonesia, Middle East, USA, Vietnam

## Our Products

- Power Generation Diesel Engines and Gensets - 5 kVA to 750 kVA
- Industrial Engines (80 HP to 355 HP)
- Agricultural Engines and Pump sets (3.2 HP to 28 HP)
- Spare parts Customer Service 113 Service Dealers, 400 Outlets
- Large Engines – Defence and Marine
- Export – Power Generation segment, Agri Pump sets and OEMs
- Power Tiller



## New products

- Revolutionary Mega T12 LW
- Stylish Min T8 DLX
- KUBIX
- Launching of new K-series pumps in international market

Two variants of engines are launched in different ratings.

- Model 4K1080TA from 156hp and 170hp at 1,500rpm and 1,800rpm respectively.
- Model 6K1080TA from 200hp and 230hp at 1,500rpm and 1,800rpm respectively.



## Memberships and Associations

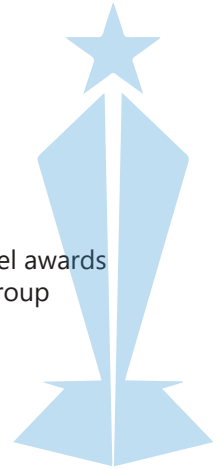
(GRI 102-13, 12)

The Company is working closely with legislative bodies, research institutes and Industrial associations such as:



## Awards Received in 2017-18

- Excellent Energy Efficient Unit -CII National award for excellence in energy management
- Selected for 13th Energy conservation awards MEDA presented in FY 16-17
- First prize in K Gr ENCON awards competition in Large Industries-Kirloskar Group
- Best En-con project in K Gr ENCON awards competition in Large Industries-Kirloskar Group
- Best Water-con project in K Gr ENCON awards competition in Large Industries Kirloskar Group level awards
- Best Renewable energy project in K Gr ENCON awards competition in Large Industries-Kirloskar Group
- ENCON Man of the Year-Kirloskar Group
- Third prize in small and medium scale industries category
- Second best managed energy efficient unit award in K group En-con competition.



*CII National Award for Excellence in Energy management 2018*



*"Noteworthy Water Efficient Unit" National Level certificate by CII Triveni water Institute CII Water Con Awards 2018.*



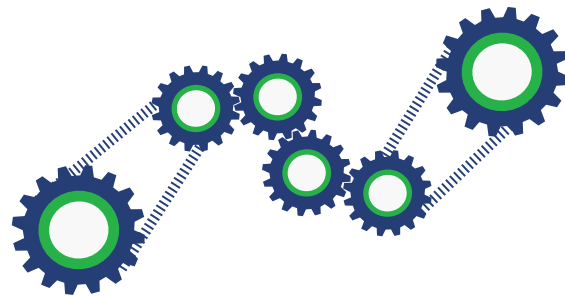
*"Dr. R.J. Rath Award" For Green Initiatives*



*ENCON Awards 2017-18*



# 3 CORPORATE GOVERNANCE



(GRI 102-8, 16, 405-1)

KOEL pays huge emphasis on transparency, accountability and integrity which is reflected in its corporate governance codes and ethics. The company has a policy to timely review its governance structure and code of business conduct and make appropriate changes to make it more effective. The company believes that the strong governance policies of the company including that for CSR and sustainability matters has enabled the company earn the trust of the investors, business partners, customers and communities in which they operate. Also, the company has been able motivate board members and its employees to work in the interest of the company and its shareholders due to its governance models. This is reflected in the company's ability to sustain through tough times and increase its revenue year on year.



Enriching Lives

**KIRLOSKAR OIL ENGINES LIMITED**

**OUR VALUES**

-  **Integrity**  
*Do what I say and say what I do*
-  **Create Wealth for all stakeholders**  
*Do the right things for the organization*
-  **Simplicity**  
*If it is not simple enough, it is not yet a solution*
-  **Empowerment**  
*Be free*
-  **Innovation**  
*Be exponential*

**VISION**



By 2025, Kirloskar Oil Engines touches the world

**VIVID DESCRIPTIONS**

-  We will constantly innovate, create products and service offerings which simplify lives
-  We will create iconic and valued global brands
-  We will establish leadership in emerging markets & create significant businesses in the developed ones
-  We will build simple systems and processes that enable exponential growth
-  We will be a leadership factory
-  We will convert our revenues into profits every 5 years

**KIRLOSKAR OIL ENGINES LIMITED**



Enriching Lives

**KIRLOSKAR OIL ENGINES LIMITED**  
A Kirloskar Group Company

**PROMISE 2021**

**VIVID DESCRIPTIONS**

-  Achieve 20% of yearly revenues from new products and services
-  Develop and nurture a basket of brands To deliver KOEL vision
-  Get double digit market share in 10 countries in defined product categories
-  Have customer centric new product development and order fulfilment process as a way of life
-  Develop a leadership fountain to succeed all senior roles

## The Board

**Atul C. Kirloskar\***

*Executive Director*

**Gautam A. Kulkarni**

*Executive Vice-Chairman (upto 14 September, 2017)*

**Nihal G. Kulkarni**

*Managing Director*

**Rajendra R. Deshpande**

*Joint Managing Director*

**Rahul C. kirloskar\***

*Non-Executive and Non-Independent Director*

**Gauri Kirloskar\***

*Non-Executive and Non-Independent Director*

**Satish Jamdar###**

*Non-Executive and Independent Director*

**Mahesh Chhabria##**

*Non-Executive and Non-Independent Director*

**Pratap G. Pawar**

*Non-Executive and Independent Director*

**R. Srinivasan**

*Non-Executive and Independent Director*

**M. Iaxminarayan**

*Non-Executive and Independent Director*

**Pradeep R. Rathi**

*Non-Executive and Independent Director*

**Vinesh Kumar Jairath**

*Non-Executive and Independent Director*

(As per annual report, 2017-18)

### Notes

\* : Deemed as Promoters within the meaning of SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011.

\*\* : Includes only Audit Committee and Stakeholder Relationship Committee as per Regulation 26 of the Listing Regulations, 2015.

# : Resigned with effect from 14 September 2017.

## : Consequent to appointment as the Managing Director of Kirloskar Industries Limited, he ceased to be Independent Director of the Company but continued to be Non- Independent Director of the Company with effect from 4 July 2017.

### : Appointed as an Independent Director with effect from 4 August 2017.





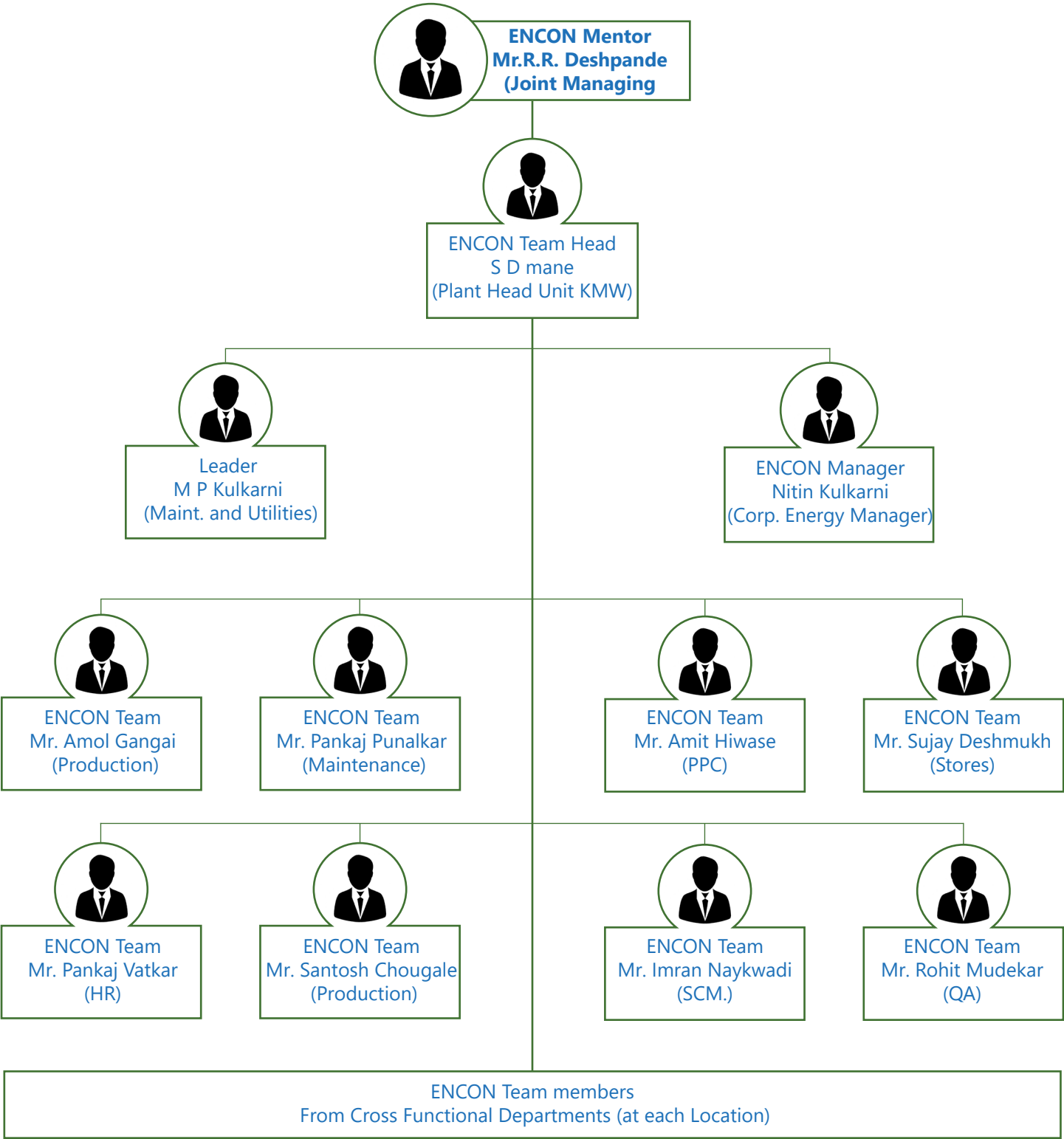
# The Board Committee







Unit KMW ENCON Team



KOEL has a robust code of conduct and ethics for its Board of Directors, senior management and its other employees which are based on the NVG guidelines. KOEL ensures that such codes are strictly adhered to by having an efficient vigil mechanism and a whistle blower policy in place. A senior company official is entrusted with the responsibility of hearing complaints regarding Code of Conduct and taking appropriate action as required. The company even has separate code of conduct for its suppliers. This ensures delivery of safe and sustainable goods for the employees.

Every year all directors and senior management team reaffirm their commitment to code of conduct. Also the new joiners at KOEL are made aware of the KOEL's way of doing business and are inducted into the KOEL's culture of transparency, integrity and accountability through sustained and sincere efforts in the initial phase of their career. This helps them discharge their duties professionally on lines of company values and vision.

There were no legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation on KOEL.

## Compliance and Risk Management

Adherence to statutory rules and regulations has always been given utmost importance at KOEL. It is due to the continuous sustained efforts taken by the management at KOEL to identify possible gaps in its processes that the company had to pay no fines or penalty for flouting rules concerning emissions, health and safety impacts of its products and services during their life cycle. The company uses work flow based legal compliance software tool that monitors and ensures compliance of all applicable regulations across all factories and offices.

KOEL has its own Internal Audit Department (IAD) which carries out periodic risk assessment and management process for the company. The internal audit procedure has been designed such that it covers various aspects of the business and is commensurate with the size and complexity of the business. Accountability is established by identifying risk owners for every risk identified who have to submit a detailed risk mitigation plan which is then implemented after proper review. An IT system has been developed for the IAD to not only help it conduct audits but also track open issues and their closure. The Audit committee reviews the significant observations made by IAD and the follow up actions taken thereon.

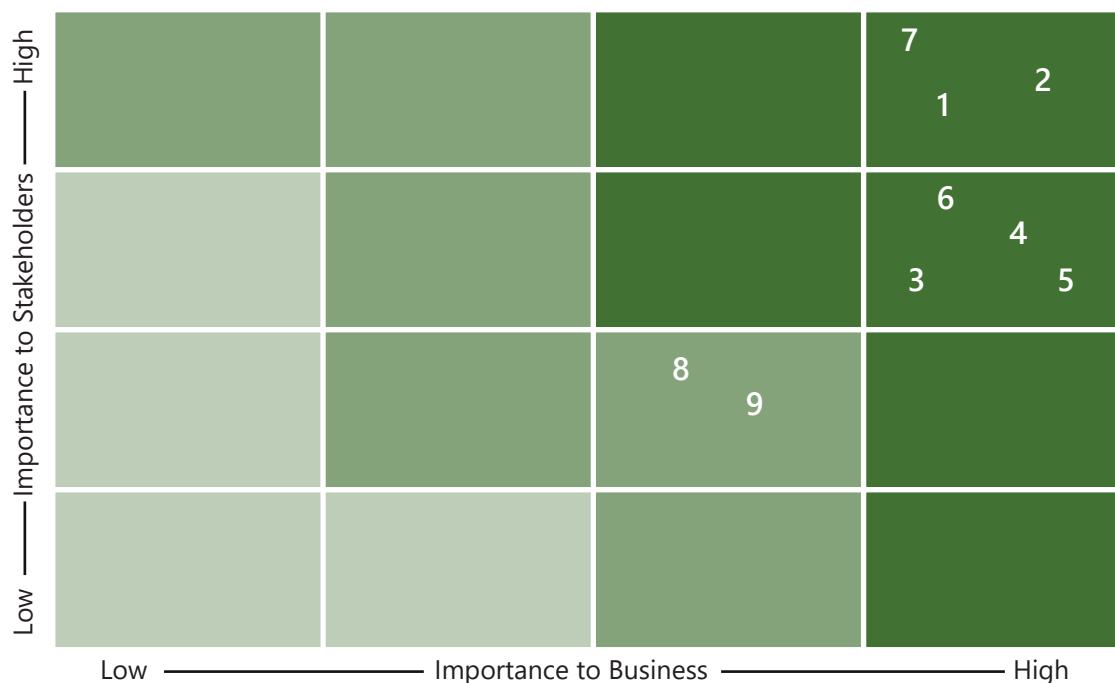
Also the business risks are managed through cross functional teams comprising of personnel from various domains. They are reviewed by business heads at periodic intervals.

Engagement Forum	Reviewed by	Issues discussed and reviewed	Key stakeholders	Frequency
Board meeting	Board of Directors	Statutory compliance, risk management internal control framework, AOP including capital budget, quarterly financial results	Shareholders	Quarterly
KGMOB	EC/ EVC/ MD	Financial and operational performance, strategic issues, organisation structure	Shareholders	Monthly
LRP and AOP	EC/ EVC/ MD and JMD	Rolled over business plans, Operational and strategic issues, new projects and developments	Senior leadership	Annual with 2-3 interactions
Weekly tracker review meeting	MD/ JMD	Segment wise business performance review and financials	Customer, suppliers, employees	Weekly
Monthly performance review	MD/ JMD	Business performance review and financials	Customer, suppliers, employees	Monthly
Functional review	Business Head/ Functional head	Functional goals, key improvement projects, AOP – monthly/ quarterly	Customer, suppliers, employees	Monthly
Production core team review	Plant Head	Daily and weekly production targets	Customer, employees	Daily
MRM /QMS ISO 14001 and OHSAS	JMD	Internal and external audit, findings and CAPA, customer issues	Customer, suppliers, employees, society	Quarterly
CSCM	VPO	Safety precautions and measures	Employees	Quarterly
Business review	Business Head	Full scale review of Actions Plan	AM, HO, Manager	Quarterly



## Materiality Aspect

(GRI 102-46, 44, 103-1)



Sector	S.N	Material issue	GRI Topics relevant to material issue
Economic	1	Innovation Management	nil
	2	Strategy for New Markets	Economic Performance
	3	Sustainable Supply Chain	Procurement Practices Supplier Environmental Assessment Supplier Social Assessment
Environmental	4	Climate Stewardship	Energy Emissions
	5	Operational Eco-Efficiency	Materials Water Effluent and Waste
	6	Product Stewardship	Customer health and amp; safety Marketing and labeling
Social	7	Human Capital Development	Employment Labour management relations Training and education Occupational health and safety
	8	Public Policy	Public Policy
	9	Overarching	Environmental compliance Socio-economic compliance Human rights assessments

All above issues are material within the manufacturing plants, except indicators related to customer, supplier and transport (which are reported from outside boundary). The material issues were identified after a thorough materiality assessment exercise which was conducted by the company which included consultations with multiple stakeholders. The report is compiled in accordance with the Core Option of GRI Standards, which requires consideration of aspects relevant to the business. The boundary for this sustainability report is the composite boundary consisting of the manufacturing plants.



# Stakeholder Engagement

(GRI 102-40, 42, 43, 44, 21)

The following table summarises various stakeholders, their engagement forums and objectives as well as the initiatives taken.

Engagement Forums	Objectives	Initiatives Taken
<b>Shareholders/ Investors and Equity Research Agency</b>		
<ul style="list-style-type: none"> <li>Annual General Meetings</li> <li>Analyst meets</li> <li>Media Releases</li> <li>Web Sites</li> </ul>	<ul style="list-style-type: none"> <li>To appraise the Stakeholders Annual and Quarterly results</li> </ul>	<ul style="list-style-type: none"> <li>Presentation to Shareholders / investor and Analysts</li> <li>Updation of KOEL website</li> <li>Report to Stock Exchange</li> </ul>
<b>Customers</b>		
<ul style="list-style-type: none"> <li>One-to-one interaction</li> <li>CSS (yearly)</li> <li>Helpdesk</li> <li>Customer events</li> <li>Melas</li> <li>Camps and Exhibitions</li> </ul>	<ul style="list-style-type: none"> <li>Develop relationship</li> <li>Anticipate short-term and long-term needs and expectations</li> <li>Capturing day-to-day requirements</li> <li>Enhance KOEL experience</li> </ul>	<ul style="list-style-type: none"> <li>Interaction of leaders with OEM's, all Channel partners in domestic and overseas markets through one-to-one interaction for developing long-term plans</li> <li>Interaction of leaders with long-term customers</li> <li>Participate in domestic and international exhibitions to explore business opportunities</li> </ul>
<b>Dealers and Distributors</b>		
<ul style="list-style-type: none"> <li>One-to-one interaction</li> <li>Monthly/ Quarterly reviews</li> <li>Helpdesk</li> <li>Dealer conferences and meets</li> </ul>	<ul style="list-style-type: none"> <li>KOEL expectations and needs sharing</li> <li>KOEL policy and process communication</li> <li>Understanding market - conditions and requirements</li> <li>Knowing customer expectations and experience</li> </ul>	<ul style="list-style-type: none"> <li>Meets of GOEMs, Kirloskar Diesel Gen Set dealers, Service Dealers and Agriculture Engine dealers</li> <li>Visits by functional heads to various OEMs, GOEMs and distributors to understand training needs, cost reduction avenues, quality systems and audits</li> </ul>
<b>Technical Collaborators</b>		
<ul style="list-style-type: none"> <li>Yearly meetings</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening relationships by creating Win-Win situations</li> </ul>	<ul style="list-style-type: none"> <li>Sharing business opportunities, spotting and utilizing the mutual strengths</li> </ul>
<b>Banks</b>		
<ul style="list-style-type: none"> <li>Consortium meetings</li> </ul>	<ul style="list-style-type: none"> <li>To approve funding and non-funding limits for the company.</li> </ul>	<ul style="list-style-type: none"> <li>Periodical meetings/ interactions with members of the Banks in the consortium</li> </ul>
<b>Suppliers and Vendors</b>		
<ul style="list-style-type: none"> <li>One-to-one interaction (NB), Supplier meets (yearly)</li> <li>Quality audit, SQTF visit</li> <li>Supplier 'A' Panel Meet</li> <li>Technology Day</li> </ul>	<ul style="list-style-type: none"> <li>Mutual sharing of needs and expectations</li> <li>Quality, Cost and Delivery Improvement</li> <li>Develop strategic partnerships and value creation</li> <li>Technology sharing</li> </ul>	<ul style="list-style-type: none"> <li>Leaders interact with world's leading machine tool manufacturers for developing world-class manufacturing setups to understand new, innovative and best practices</li> <li>Leaders interact with suppliers through meets, One-to-one interactions and plant visits for developing long term partnerships for 'Quality Capacity' and technology leaders help suppliers to improve Manufacturing setup</li> <li>Joint improvement projects and quality contests</li> </ul>
<b>Society and Community, Professional Bodies</b>		
<ul style="list-style-type: none"> <li>Social functions and welfare activities</li> <li>Community meets on ongoing basis</li> </ul>	<ul style="list-style-type: none"> <li>Understand KOEL experience</li> <li>Contribution to society by implementing various initiatives</li> <li>Spreading awareness on environmental and social issues</li> </ul>	<ul style="list-style-type: none"> <li>Interaction with society/NGO for WASH initiative</li> <li>CSR committee meetings, CSR survey</li> <li>Engagement of KOEL leaders with professional bodies</li> </ul>

Stakeholders	Mode of communication	Concerns raised and resolved
Suppliers	Meetings, , emails, fax, mutual visits, surveys both internal and external	Payment terms, new business
Customers	Meetings, smart phones applications, phones, emails, fax, customer visiting us, surveys both internal and external	Timely delivery, product quality, value-added products, Service Quality
Employees	Meetings, seminars, news letters	Increments, promotions, amenities, work satisfaction, safety, training, Performance
Local community	Meetings, Messages	Employment for locals, expansion of CSR activities, environmental impacts
Banker	Meetings, mails	New loan off take, financing cost, market information, risk mitigation, business strategy, company performance
Local statutory bodies	Meetings, mails	Legal requirements, effluent discharge norms, other employee and labour permissions etc.

The company has established effective channels for communication with the stakeholders which helps it identify their issues and address them effectively and create value for the company and the nation. KOEL's key stakeholders include customers, dealers, distributors, suppliers, vendors, employees and the local community.

The company has been in a constant endeavor to enrich the lives of the vulnerable and disadvantaged sections among the stakeholders group through its CSR and other activities. The company has laid special focus in the area of Health, Education, Environment and Rural Development which has brought enrichment to the lives of many people.

The stakeholder wise substantial sustainability measures undertaken are summarized in the table below.

Stakeholders Group	Purpose of Engagement	Achievements
Customers	Legally Compliant Products	Successfully upgraded new product lines from CPCB stage I to CPCB stage II requirements
	Fuel efficient products	Fuel consumption reduced by 25%
	Environment friendly packaging	"Wood FREE" packing
Suppliers	Local sourcing	57% suppliers within 300 kms from Pune plant
	Environment compliance	<ul style="list-style-type: none"> <li>Green Sourcing</li> <li>Yield and Productivity Improvement</li> </ul>
Employees	Health and Safety	<ul style="list-style-type: none"> <li>No occupational illness</li> <li>3% of workforce in Health and Safety committees, all Manufacturing plants certified to OSHAS 18001</li> </ul>
Shareholders/ Investors	Being Corporate citizen	Various CSR projects developed and supported Started business responsibility report (BRR in 2016-17)
Society	Development of the local communities residing around Mfg	<ul style="list-style-type: none"> <li>WASH Initiatives</li> <li>Enhancing Employability</li> <li>Health Check-up camps</li> </ul>
	Renewable energy initiatives	<ul style="list-style-type: none"> <li>Open access Renewable energy purchase for Kagal and Khadki</li> <li>Renewable energy consumed in 2016-17 – more than 66 lakhs Units</li> <li>CO2 emission reduction</li> </ul>
	Eliminating Ozone depleting substance	<ul style="list-style-type: none"> <li>ZERO level achieved</li> <li>Reduction of equivalent CO2 emission</li> </ul>



## Supplier Engagement

Supply chain is an important component of any manufacturing process. It's important to have a very robust and efficient supply chain to sustain in today's competitive era. Hence, it's important that you pay special emphasis on your supplier selection and equip them with necessary tools and trainings so that they help establish responsive and cost-effective supply chain. Keeping this in mind, KOEL has laid special emphasis on its suppliers and considers them to be at the core of business. KOEL ensures early involvement of its critical suppliers at an early stage of new product development. This helps in ease of manufacturing and ensure quality and cost competitiveness. KOEL keeps its suppliers updated regarding business environment, plans and other relevant initiatives through its quarterly communication. The company is engaged in the Samvardhan Programme for MSME suppliers with a view to change owner's perspective to an Entrepreneurial business person. The company is embarking on deployment of Lean principles for its MSME. This gradually helped the suppliers become a Zero Defect Organization.

KOEL holds Annual Supplier Quality Improvement Contest. The event helps all the suppliers learn through various presentations covering diverse areas and apply changes to their existing processes. Also Technology Days are organized at certain times of the year where suppliers get a chance to showcase their products and new technologies which can be appropriately used as end products.

The company is aligning itself to the modern concepts of industry 4.0 and also trying to align its supply chain to the same. Many initiatives are lined up in this direction and once implemented it will bring in significant changes in the company supply chain and make it ready for the future.

Special emphasis is being paid to the process of New Product Development. The company is working on critical chain project management (CCPM) methodology with a view to correctly prioritizing the issues leading to saving of time and energy of all the stakeholders involved.

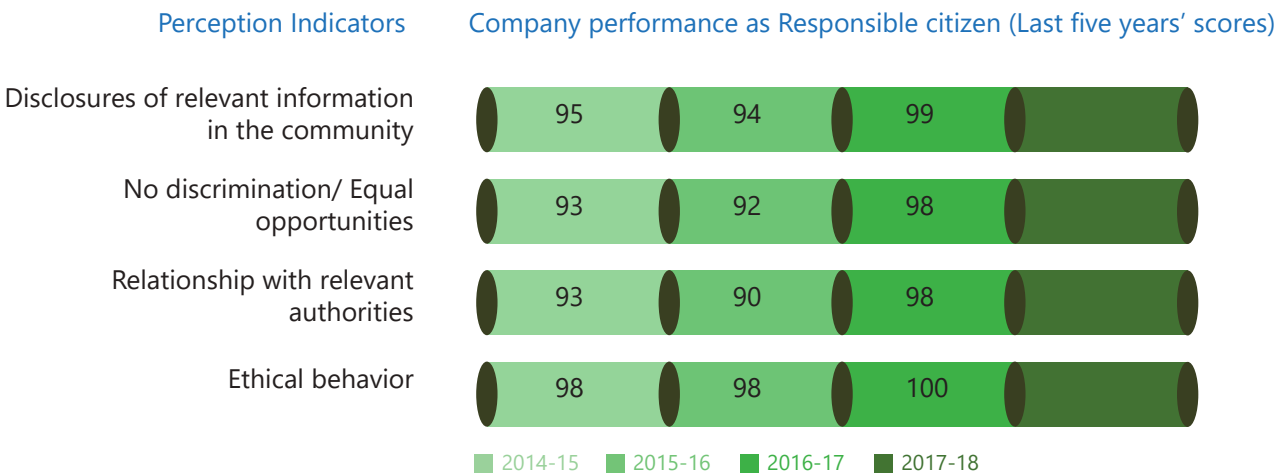
## Grievance Redressal

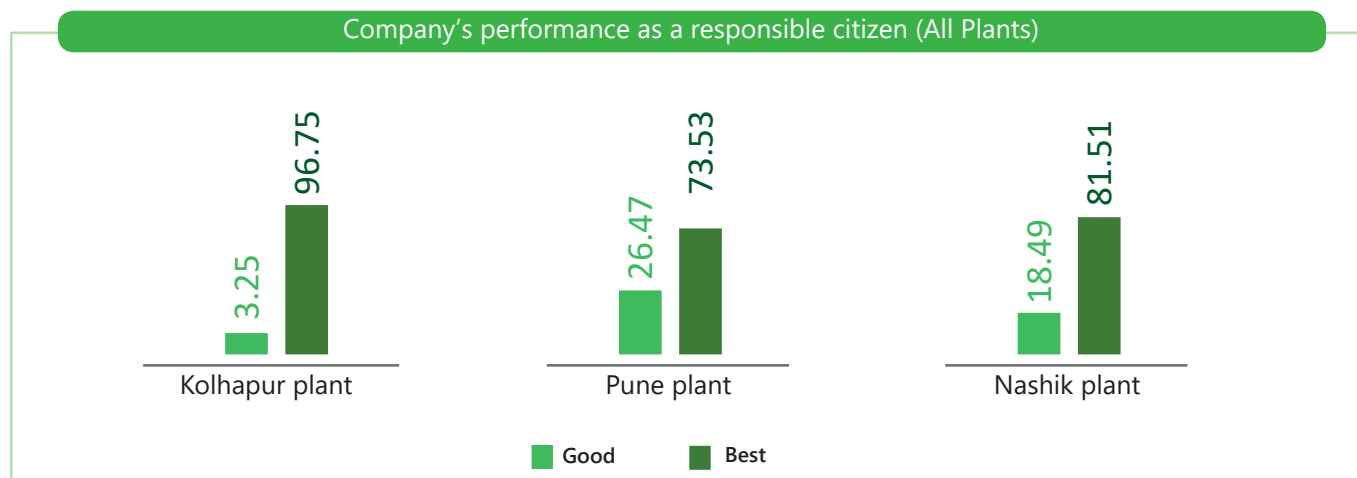
(GRI 103-2, GRI 418-1, GRI 102-43, 44)

### Community

- KOEL has always paid special emphasis on the development of community in which it operates. CSR activities are carried out for their betterment by the company with a special focus on Health, Education, Environment and Rural Development. Also, the CSR representatives meet directly with the community members and try to address their grievances.
- KOEL plans to set up a structured community grievance redressal process in the next reporting period.

## Result of Society perception survey

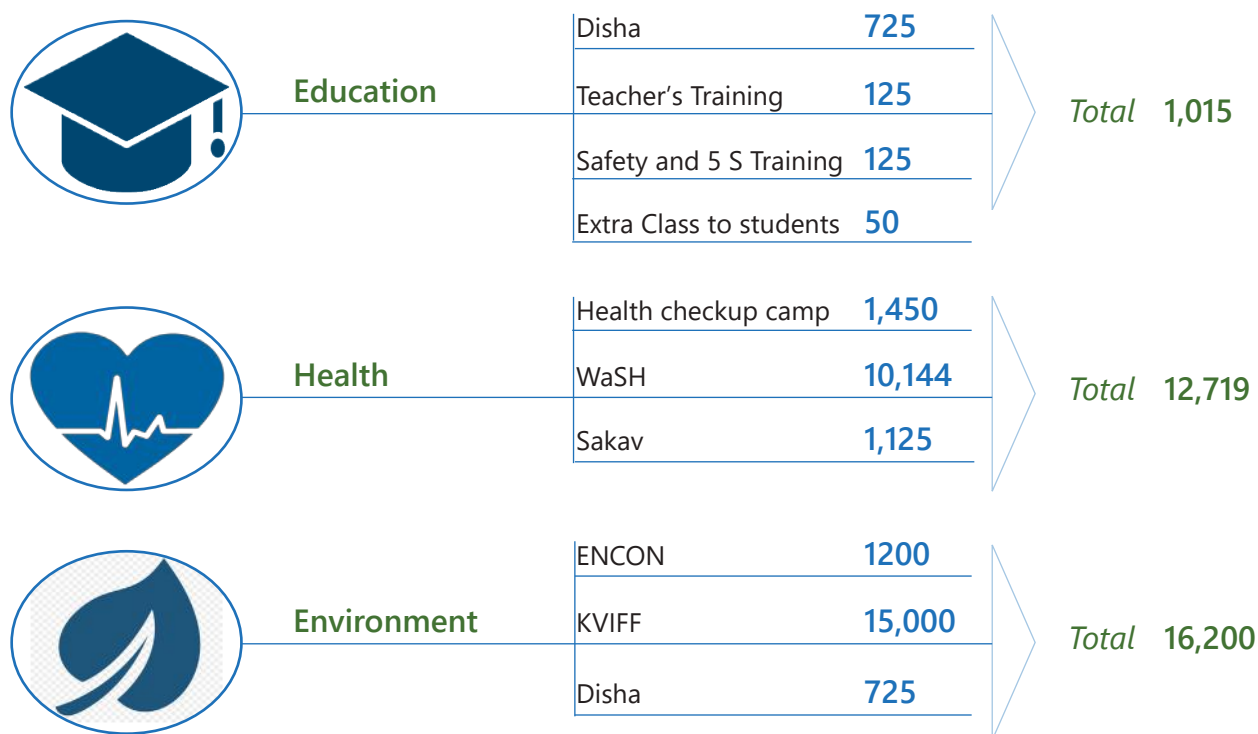




## Key expectations of society and their likely impact

Expectations of society	Impact on KOEL
Pollution free products	Developing CPCB II compliant engines resulting in competitive edge
Employment generation	New plant at Kagal
Support for social projects	WASH and Akansha initiatives with focus on Education and Health

## KOEL CSR initiatives- number of beneficiaries' summary FY 2017-18



### 1. Employee

- The standard procedure of contacting reporting manager or HR department was communicated to the employees. The company also has a strong whistle blower policy which provides a mechanism for the employees to report to the chairman of Audit Committee any instance of violation of company's code of conduct. Also the company has an Internal Complaints Committee to address and resolve complaints of sexual harassment.

### 2. Supplier

- The standard procedure of contacting procurement / finance department was communicated to via purchase and work orders.

### 3. Customer

At KOEL engagement with customers takes place through the following mechanisms:

- One to one interaction as needed
- Periodic campus exhibitions
- 24x7 helpdesks for addressing customer grievances
- Launching of customer helpline for international market
- Door to Door campaign done to ensure farming machines are in good working conditions
- Introduction of SMS linked Customer Delight Index (CDI)
- Launching e-FSR i.e. Electronic Field Service Report system to connect with their Service Dealer Engineers

Besides above, the company also holds various customer engagement programs like Customer Mela, Van Campaign and Customer and Operators Training Program.



## A decorative graphic consisting of six interlocking gears. The gears are dark blue with green outlines and are arranged in a zig-zag pattern across the top of the page.

The company is committed to bring growth opportunities to all including the most vulnerable sections of the society and equitable distribution of wealth in the society. The company takes concrete steps in this direction especially through its CSR programs. The company's CSR activities are monitored, implemented and reported by a CSR board constituted specifically for this purpose. The company has also formulated a CSR policy which is available on its website. The company collaborates with NGOs who along with the company volunteers help company implement its CSR policy and reach its goals. Also a CSR report is published where the company explains its CSR activities in great detail. Some of the major initiatives taken up by KOEL are as follows:

**Health:** KOEL understands that good health is one the basic necessities for a fruitful and happy life ahead. Keeping this in mind, KOEL has initiated various programmes for the people living in the vicinity of its plants. KOEL conducts Eye checkup camps for senior citizens of the nearby communities. Also various health awareness programs such as stress management, healthy diet and HIV/AIDS awareness camps for the nearby communities was carried out to raise awareness for the same.

The programme was implemented with the help of various government bodies and NGOs. Total 365 Employee-volunteers, comprising of managerial employees and team members, have been involved in implementing WaSH activities in the respectively assigned schools. This has grown from just 43 in 2009-10 and 149 last year. Total 4,628 man-hours has been invested by the KOEL volunteers for WaSH initiative. Close to 13,600 man-hours were invested by Kirloskar employees for the programme.

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**‘SAAKAV’-Life Skills Training Program:** It’s an initiative intended to facilitate the development of adolescents with the help of life skills development process and initiating a dialogue on the same with the parents and teachers. Since last four years, special trainings for teachers were conducted by expert focusing on physical and emotional developmental stages of children, behavioural patterns and understanding the problems of children.

**11th Kirloskar Vasundhara International Film Festival (KVIFF):** This year festival theme was 'Save River, Save Life'. KVIFF is an innovative attempt to explore nature and analyse issues related to environment, wildlife, energy, air and water.





It's the only eight days long film festival in India that combines exclusive films screening, presentations by experts and allied activities. This year KVIFF has showcased 155 Award winning, internationally/ nationally acclaimed films along with 70 allied activities. In addition to the film screening, special activities such as Photography Exhibition, EcoBazaar, River Walks, EcoQuiz, Sahitya Sammelan. 'Vasundhara Sanman', 'Vasundhara Gaurav' and 'Vasundhara Mitra' were presented to eminent personalities for their outstanding contribution in the field of environment protection.

**Environment:** The Company follows ISO 14001 based Environmental Management System in line with its policy of Environmental protection and restoration. The company purchases renewable electricity through open access to improve its carbon offset. Other than this, various initiatives like tree plantation programmes, process improvement and changes in operational practices are followed as part of the environmental policy. ENCON Initiatives, Hasat Khelat Paryavaran and Eco-club in schools: These initiatives have been started to increase the interest about environmental issues amongst the students. Various types of competitions were organized such as drawing, essay, demonstration about solar cooker, making best from plastic waste, eco-friendly articles, awareness lectures and workshops on energy and water conservation were organized in the schools.

**Sustainable Livelihood:** Income generating trainings has been conducted such as preparation of snacks, spices, pickles, papad, decorative articles, crafts, rakhi, diwalil lantern, paper bags and basic tailoring and Punjabi dress making training have been conducted for women. KOEL CSR Team has been creating a platform for the women to display and sell their homemade products.

#### New Initiatives –Village Development Program

KOEL CSR team has taken new initiatives to extend the reach beyond the communities around the Plants. Under these initiatives one tribal community (Kerle Dhangarwada) has been selected from Kolhapur District. The baseline survey was conducted with the help of NGO to find out the needs of the community. According to the needs, initiatives like health checkup camps, educational help, library and sports material support, improved vegetable seeds distribution, manure making training were conducted.

Khadki Plant has also extended its CSR scope. The nomadic tribes community from Dehu Fata has been selected for its development. KOEL CSR Team have started extra classes for the school children, as a result of which, 5 school dropout children have restarted their schooling. One library is started for them and group reading practice is going on to develop their reading habit.

Nasik Plant has extended its CSR scope for the tribal village Gajarwadi (near Trimbakeshwar, Nasik). E-Learning Computer System (K-Yan) has been provided to primary school which is enabling tribal school children to improve their computer literacy.

**SKILL INDIA:** In line with the Government appeal of 'Skill India', from 2015, KOEL has started a specially designed ITI batch (Machinist Trade) with the help of Shirolu Manufacturers Association, Kolhapur (SMAK) ITI for improving employability of the unemployed youth from nearby villages. This ITI course includes 30% theory and 70% practical as required by the surrounding industries.

CSR initiatives at international locations:

- Blood donation at Dubai by KDMCC employees
- This year 4th February 2018 was celebrated as Car Free Day in Dubai .Kirloskar DMCC also contributed to reduction in carbon footprints where all of us avoided private cars commuted by public transport Bus and metro on 5th February 2018 for the maximum availability and participation of team members.

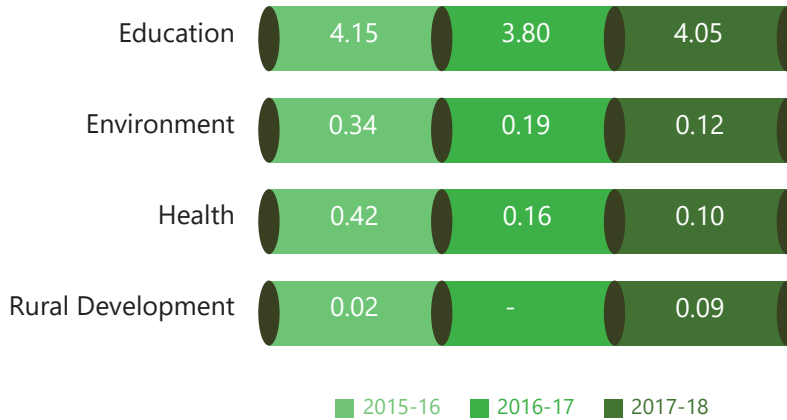
#### Improvement Action taken based on findings of Society Perception Survey:

- Vocational Training for Youths with the help of SMAK Industrial Training Institute
- "SAAKAV – Life Skill Training Program" for Adolescent Boys and Girls
- Save Water Campaign designed
- Employees participation on CSR activities
- Training for SHGs planned in co-ordination with Symbiosis Institute
- Workshop for children covering subjects like science
- Disha Career guidance, Scholarship, Library and Sports training and sports items distribution



**ENCON Initiative at KOEL:**

Energy conservation activities were implemented at various manufacturing facilities. Each year KOEL Celebrates National Energy Conservation Week to accelerate the ENCON awareness mission at all Plant locations and participates in the KGroup ENCON Award Competitions. KOEL Kagal unit have achieved another milestone in CII National ENCON Award Competition for receiving Excellence in Energy Management Award consecutively for five years in row. Similarly, State Level ENCON Award by MEDA consecutively three years for Kagal and Nasik plants.

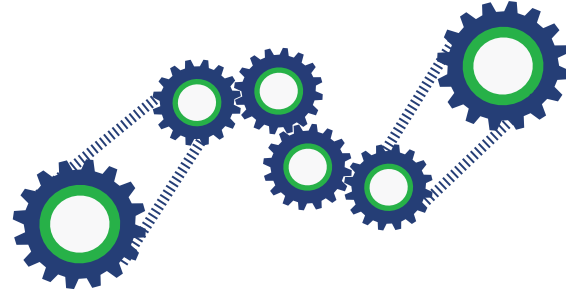
**Expenditure for community initiative (in Crores)**

Some of these programs were implemented with Kirloskar Institute of Advanced Management and Studies (KIAMS), Vasundhara Club, Kirloskar Foundation and others.

*"Yuva Sanvedana" 2017**District Collector's speech**Gram Sanvedana 2018*



# 5 INNOVATION AT KOEL



KOEL has always believed in the power of innovation and considers it to be an important driver for growth. The excellent R&D facility set up by KOEL is an important reason for it being able to sustain its business since so long. The R&D facility works closely with suppliers and other business partners and also various renowned research institutes of the country like Petroleum Conservation Research Association (PCRA), CPCB, Indian Institute of Technology, Vehicle Research and Development Establishment etc. KOEL's strong focus on innovation has enabled it to come up with products that can deliver high value for the customers at a comparable cost. The RandD strategy continues to focus on increasing efficiency, customer satisfaction and strengthening business presence in growing markets.

The innovation carried out by KOEL grouped into different categories are as follows:

## Several enhancements were made in existing product lines

- The High Horse Power genset product portfolio from 910 kVA
- Heat Exchanger cooled and stone crusher genset range
- 12 HP power-tiller
- Tier 3 engines from 30 kW to 100 kW power range for emergency standby market in US.
- BS III emission compliant engines for construction equipment
- CPCB stage II emission norms applicable for power generation
- Bharat(TREM) Stage III emission norm compliant engines for tractor application
- Range of fire pumps were enhanced by adding 3000 rpm engines

## Innovation for a sustainable future

- Designing of new engine platforms namely K4300 and R550
- Cost effective emission solution for Tier 4 Final/ BS IV CEV norms
- Development of special marine and defense application
- Implementation of critical chain project management methodology for new product development

## Future Outlook

- Focus on modernising and upgrading existing product line
- Further enhance HHP range
- Development of global engine platform
- Implementation of critical chain project management methodology to set right project priority
- Getting supply chain aligned with the concepts of industry 4.0

### Your company is harnessing real-time responsive technology by

- Installing Remote Monitoring units (KRM) in the DG sets. These are connected to a Genset controller that enables proactive monitoring of all genset operating parameters, warning and alarms on real time basis. Alerts are generated to service dealers and service calls generated in system automatically.
- Digitizing of service data with the " Electronic Field Service Report" (e-FSR) thereby enabling faster and better service response and real time updates to customers
- Digitizing the rural distribution network for efficient and effective delivery through Agrifast
- Providing multiple farming solutions to the small and marginal farmers with the innovative Mega T and allied farm equipment.



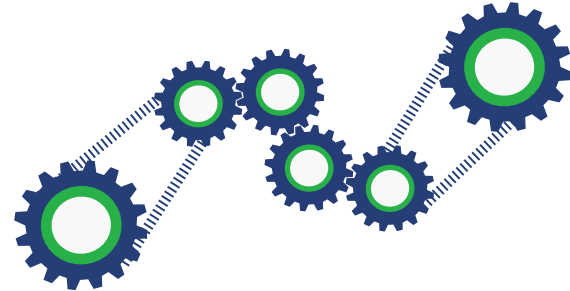
- A state of the art test setup is under deployment where all test cells are being upgraded to new facility
- A brand new proto engine assembly setup is deployed to meet the futuristic needs of the product portfolio
- Various assembly and test facilities for HHP segment viz. K4300, 1010kVA are in the advance stages of deployment
- Engine performance test facilities for torsion, NVH and swirl
- Test setups for oil pump testing, coolant flow testing, FIE calibration support characterization of the critical engine subsystems
- Individual component, subsystems test rigs to cater to HHP requirements are in the design stage
- Renovation of test facilities caters to reliability, endurance requirements of engines
- Four emission test beds, two transit dyno and two steady state dyno with capabilities of TIER IV emission optimization are in place
- Planned investment for testing compliance to emission US Ties III and above

## New products launched

Product category	New products launched
HHP	<p>750 kVA</p> <p>750 kVA HE Cooled</p> <p>1010 kVA</p> <p>910 kVA</p> <p>250 – 625 cold start range</p> <p>250 – 750 stone crusher range</p> <p>Remote monitoring of Gensets</p> <p>Marine Aux Genset for Marine NOPV</p>
Exports	<p>Water-cooled Gensets portfolio defined and phase I executed</p> <p>Exports enhanced project executed with large number of functional and aesthetic improvements</p> <p>FMUL listed / non-listed firefighting engines</p> <p>Compact Gensets range of 4K and 6K series</p>
End products	<p>Power tiller Mega T 15, Mega T 12, Power Weeder MINT 8, MINT 5 and electric pump sets</p>



# 6 STRATEGY FOR NEW MARKETS



This year was accompanied with stagnation in European economy and challenging situation in Middle East and Africa. The business environment in the traditional international markets was adversely affected by volatile political and forex situations. Even after such challenging situations, the international market grew from Rs.152 Crores in previous fiscal to Rs.182 Crores. It was mainly because of the ability to penetrate new markets that the international sales increased by 20%. The company achieved double digit growth in the Middle East, South East Asia and American regions. The company has put significant emphasis on its international business in line with its vision of touching the world by 2025. This has been a major growth driver for the company. The company faces severe competition from Chinese Exporters and other domestic players. The company added new product lines to its international market like power tillers and gensets in the range of 100KVA to 160 KVA which helped the company sustain competition. To prioritise the markets where the company wants to expand, KOEL has developed Market Attractiveness Index. The company has introduced its products in Ecuador, Peru, Haiti, Guatemala, Venezuela and Colombia through its subsidiary KOEL Americas Corporation, USA. The company is in the last leg of obtaining EPA certification for specific engine models which will enable the entry into USA power generation market.

## Top four regions of exports by sales

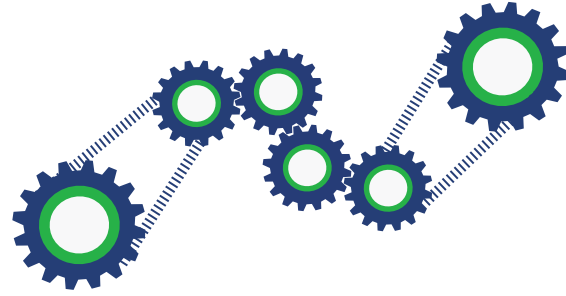
Region	FY 2016-17	FY 2017-18
Middle East	45%	48%
Africa	38%	28%
South Asia and South East Asia	10%	12%
North and Central America	6%	11%
Others	1%	1%

KOEL has managed to put in place a lot of customer and market driven measures which will help consolidation in the future and growth in the coming years. Key highlights in the International business for the year are as under:

- Intensified efforts to develop New Markets which accounted for 14% of export business
- Added new OEMs for FMUL fire-fighting engines. This business contributed 11% of the overall export business
- Introduced new models in the range of 100 to 160 KVA gensets. These have been received well by the customers
- Introduced Power Tillers in select markets
- Efforts taken in the power generation markets of South East Asia have seen initial success and the company intends to build on this in the next financial year
- In line with KOEL's focus to go digital, KOEL has launched Warranty Administration Portal and Customer Help line for international markets.



# 7 SUSTAINABLE SUPPLY CHAIN



(GRI 102-9)

KOEL supply chain includes material procurement, inbound logistics, material handling and finished product supplies to the markets. KOEL understands the criticality of maintaining a robust supply chain to build a sustainable business. Hence, the company has focused to build a strong supplier's base over the years. This has ensured on time delivery and maintaining desired quality of products.

The company has well defined Sourcing Policy and Supplier Quality Manual which outlines the plans for supplier development. The policy emphasizes procurement from local vendors particularly those in plant's vicinity. Continuous enhancement of supplier skills and competencies is ensured through a well-structured systems and activities.

KOEL engages in activities like Samvardhan Program for MSME Suppliers with a vision of transforming owner's perspective to an Entrepreneurial business person. KOEL helps in facilitating formation of MSME clusters along with National Productivity Council (NPC) and MSME ministry. Other than this, 'The Annual Supplier Quality Improvement Contest' is held. It is a forum for suppliers to share and learn from their peers. It is a one of its kind program and has become an industrial benchmark. Apart from these, several technology days are conducted throughout the year which gives suppliers a platform to showcase their products and new technologies.

As part of Supplier trainings, special sessions were conducted on:

- Six Sigma
- Value Stream Mapping
- Single Minute Exchange of Dies (SMED) for handling complex situations
- Regular training programmes were also provided on PPAP, Energy Conservation, Geometric Dimensioning and Tolerances (GDandT), Measurement System Analysis
- Trainings on Supplier awareness were also conducted

Apart from these, the company has started applying the concepts of Industry 4.0 which will enable the company to develop future ready supply chain.

KOEL is committed towards conducting its business in an environmentally sustainable manner. Keeping this in mind, the company has defined a Green Supply Chain Policy which aligns actions in supply chain in an environmentally friendly manner. It advocates judicious use of natural resources like wood, recycling of wastes and adoption of responsible business practices. The company has saved 6371 trees in this manner. The supplier manual contains specific instructions on environment, occupational health and safety management systems. The company lays key emphasis on sustainability while selecting its logistics partners. The company initiated the use of CNG vehicles for inbound transportation. The company has a policy to engage with only those vendors who are compliant to all environmental laws. The company conducts awareness programs for use of non-conventional sources and installation of solar panels on supplier's premises. Periodical assessment of suppliers for their environment, health and safety management systems are done.



Senior leadership has special focus on improving supply chain productivity. They carry out regular engagements with suppliers in respect to improving quality, productivity, on time delivery, cost reduction and use of technology. Special workshops and periodical meetings are conducted for the suppliers to familiarize the suppliers with the changing needs of the company with emerging business scenario and disruptions being caused by technology. The outcome of these meetings helps in making strategic decisions like capacity planning and design changes.

As per the commitment to sustainability, KOEL has adopted a policy of green supply chain. The company has adopted paperless freight billing system as per that policy. Also, KOEL has adopted practices like local sourcing and logistics optimization which helps in reducing environmental footprint. Also, KOEL encourages 3R(Reduce, Reuse, Recycle), rain water harvesting, tree plantation and usage of energy efficient equipment at supplier premises.

- Conversion of Sand Casting to Aluminium Die Casting for over 30 components thereby reducing Silica Sand consumption.
- Reduction of power consumption per unit of castings produced.
- Supplier PPAP document in soft form instead of Hard copy.
- Re-designing packaging and forwarding method for base plates of Gensets.
- Introduction of Metal Skids instead of wooden packaging for radiators higher KVA engine models and alternators.

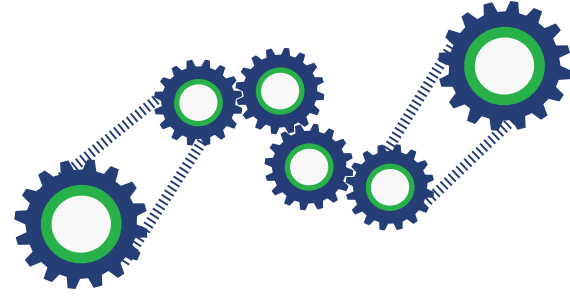
## Supplier Assessment

Percentage of new suppliers screened  
100% critical suppliers (in production parts)

COEL has a constant engagement sessions with AGOEMs, Service Dealers and Distributors to understand the market demand and the requirements of specific products and services. The engagements also help in understanding the expectations of the dealers and distributors that helps in better collaboration. Further, it helps in identifying the gaps in the system that helps in cost reduction and better services to the customers.

Further, to make things more transparent and simpler for the distributors/ dealers/ AGOEMs/ OEMs, KOEL has given it's suppliers access to iStore(inventory store) and CRM. This helps them view business related transactions on real time basis. Hence, the time in follow ups has reduced considerably.

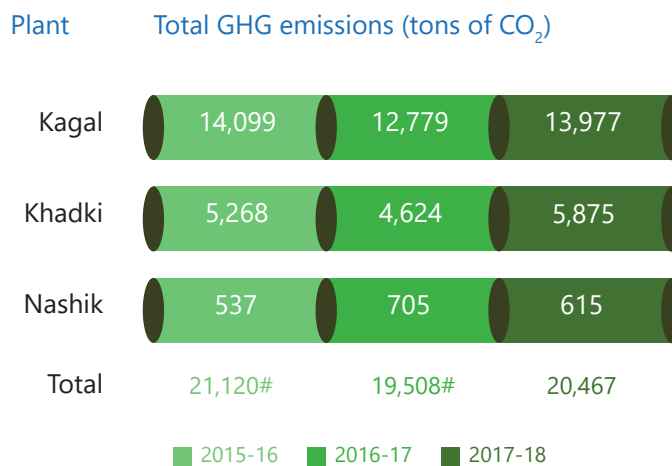




(GRI 305-1, 2, 4, 5)

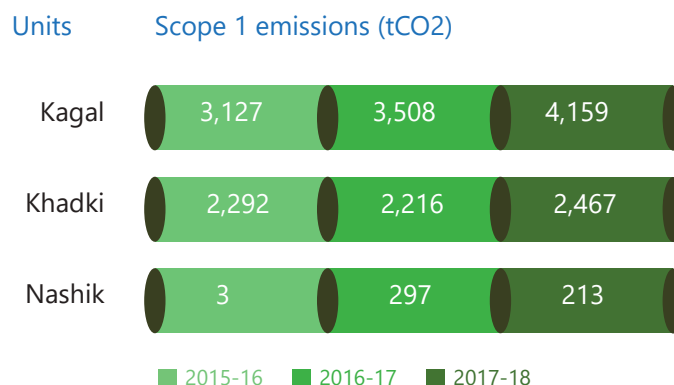
KOEL monitors its Greenhouse Gas (GHG) emissions and related KPIs as part of its IMS monitoring system. Various energy efficiency initiatives in operations and products are planned by Company to reduce its carbon footprint. During the year 2017-18, KOEL has purchased Renewable energy through Open Access for its Kagal and Pune Locations, which has helped it improve its carbon offset.

The emissions / wastes generated are well within limits prescribed under consents of SPCB/ CPCB. These are also reported to SPCB as per the process prescribed by them every year. No show cause and legal notices were received during year under review from the CPCB or SPCB at any of KOEL operations



*Note: (1) gases included – only CO<sub>2</sub> (CH<sub>4</sub> and N<sub>2</sub>O contribute <2% in the total, so excluded); (2) Chosen base year - FY 2014-15, for comparison over three years, as practiced in last few reports; (3) Standard methodologies and assumption - 'quantification methodology = Activity data x GHG emission factor'; (4) Source of emission factors - World Resources Institute's (WRI) Corporate Protocol Standard for organizations estimating GHG emissions, Intergovernmental Panel on Climate Change's (IPCC) 2006 Guidelines for National Greenhouse Gas Emission Inventories, CEA Baseline CO<sub>2</sub> database for Indian Power Sector, Ver. 10; (5) Consolidation approach – equity share*

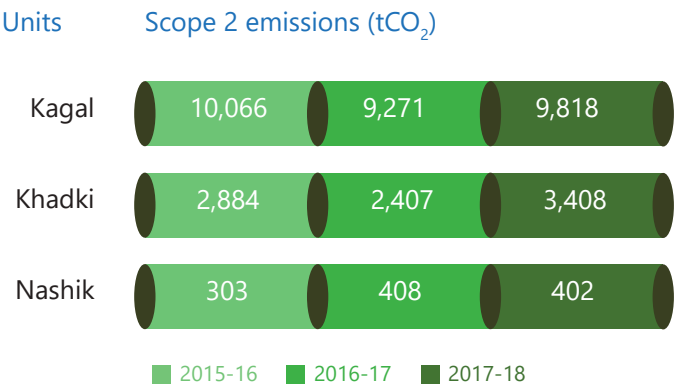
## Scope 1 emissions



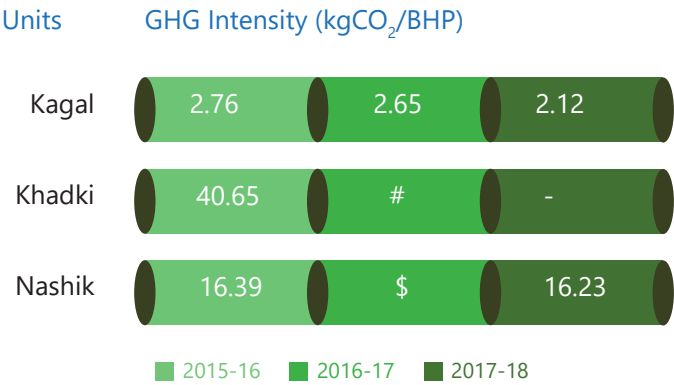




Scope 2 emissions



GHG emission intensity



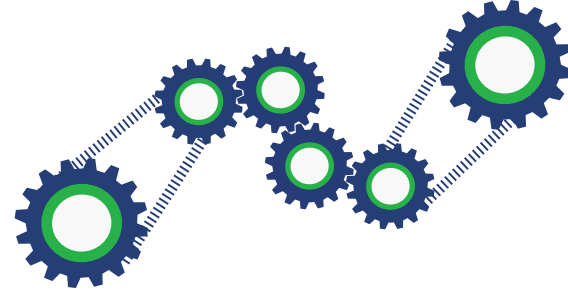
# not comparable as total production is stopped; \$ result not comparable as production is significantly lower

At each plant, there is management review (by plant level Legal Committee) for the EHS compliances every quarter. The company also maintains a Register of Legal and other requirements, shared in the intranet 'mykoel.com'. In the Evaluation of Compliance, the company's Legal Committee maintains compliance for each of the applicable regulations. Any observations from the committee are escalated to the MD in the management review. There were no notices received or penalties paid for the non-compliances with environmental laws and regulations.



Name of the Unit	Pune (Khadki)	Kagal (KP1+KP2)	Nasik
	Apr 2017- Mar 2018	Apr 2017 - Mar 2018	Apr 2017 - Mar 2018
Occupational Health Initiatives (Provide Nos. and details)			
Initiatives / Programmes implemented	Yoga sessions started at Recreation Hall to inculcate yoga habit.		
	Blood donation camp organized on 26th May 2017. 176 employees donated blood. Risk of osteoporosis especially in Women estimation through a special drive through Sancheti Hospital by Bone Mineral Density scanning. Osteopenic cases identification and treatment. Mammography and PAP Smear testing of all women employees.	Blood donation camp organized on 28th May 2017.	Blood donation camp organized on 28th May 2017.
Health Awareness Trainings	Lecture on Liver Disorders by Gastroenterologist Dr. Harshal Gadhikar. Brain Stroke and Epilepsy Lecture by Neurologist Dr. Deepali Eksambhe. International Yoga Day. Tobacco Cessation by Medical Oncologist Dr. Jayant Gawande. Gastrointestinal Disorders by Dr. Mandar Doiphode Organ Transplant and Donation by Dr. Anagha Warudkar. Session on Health Happiness by Mr. Deepal Keskar and Charudatta Salunke. This session covered <ul style="list-style-type: none"> <li>- Four sources of energy</li> <li>- Prana</li> <li>- Importance of breath</li> <li>- Nature of Mind</li> <li>- Pranayam</li> <li>- Meditation</li> </ul> Ergonomics and Physiotherapy exercises session covering Knee and spine disorders by Dr. Renuka Hatekar and Dr. Abinas Sudan. Awareness session at Khadki plant on Sleep Disorders (Snoring and Sleep Apnoea). First Aid training with CPR of Bhare plant employees with refresher training of trained first aider completed. Management of Heart Attack by Dr. Suhas Hardas	1. One programme organised on Stress Management. 2. HIV AIDS awareness programme organised	Awareness session on Heart Diseases at LEBG Nashik by Dr. Sheetalkumar Hiran. On occasion of world Diabetes Day session by Dr. Vinod Chaudhari.
Health check up	Periodical Medical Examination of all employees including contract and KOEL. Roll.	Periodical Medical Examination of all employees including contract and KOEL. Roll.	Given by Dr. Dhongade
Initiatives / Programmes implemented (Initiated and implemented by Safety at factory locations).	EHS, Firefighting Emergency plan awareness and mock drill trainings conducted by Corp. Safety. Support provided by Corp. Safety for celebrating National Safety Week.	Road Safety Awareness campaign organized and conducted by Safety dept. involving Safety committee members of KP1,2,3 factories in Kolhapur city at 4 major road junctions. Drivers wearing helmet on two wheelers and seat belt in four wheelers and not using mobile while driving were appreciated with specially designed Well Done appreciation cards.	EHS and Firefighting trainings conducted by Corp. Safety. Support provided by Corp. Safety for celebrating National Safety Week.
Safety Training			
Training man-hours	303	3518	382
Accident statistics:			
No. of Accidents (Reportable as per Factories Act)	0	0	0
Frequency Rate of Accidents	0	0	0
Severity Rate of Accidents	0	0	0
Reference to Corporate Sustainability Report			
Any major deviation (Positive/ Negative) with respect to Corporate Sustainability Report (FY 2016-17) data related to EHS? Pls. provide details e.g. accident rates etc.	ZERO REPORTABLE ACCIDENT	ZERO REPORTABLE ACCIDENT	ZERO REPORTABLE ACCIDENT
Any plans mentioned in the Corporate Sustainability Report (FY 2016-17) and implemented in FY 2017-18? Please, provide details.	Nil	BBS briefing to SLT members and Sr. Management ULs and Plant head completed for Kagal Plant-01 Factory.	Nil

# 9 OPERATIONAL ECO-EFFICIENCY



(GRI 301-3)

KOEL's management is environmentally conscious and it makes best possible efforts to minimize its environmental footprint. KOEL follows ISO 14001 guidelines which has helped KOEL implement a robust Environmental Management System with its view on protection and restoration of environment. KOEL makes utmost efforts to minimize environmental damage even in neighbourhood of its plants. KOEL's commitment to sustainable operations is extended even to its suppliers and contractors.

All the plants of KOEL are 'zero discharge' plants, i.e. the treated effluent is used for gardening purpose within their campuses and no discharge leaves the premises.

## Pollution control

KOEL's plants are fully compliant with the CPCB and respective SPCB norms.

## ENVIRONMENT, OCCUPATIONAL HEALTH AND SAFETY (EHS)

During the year, numbers of initiatives were undertaken in your Company's plants and offices in the areas of Environment, Occupational Health and Safety (EHS). Some of the key initiatives are listed below –

### KAGAL PLANT

#### Environment initiatives

- Installation of Activated carbon filter and pressure sand filter at ETP for better quality of treated effluent
- Modification of ETP lab for analysis of effluent parameters like BOD, COD, TDS.
- Enhancing the capacity of rain water storage ponds.
- Carry out hydrogeological report for CGWA application.
- Membership of "Maharashtra Green army" from "Government of Maharashtra forest department" for participation in 4crores tree plantation programme
- Utilization of filtered rain water for cooling towers, paint booth and kitchen utensil washing.
- Use of Bio-pesticides for pest control.
- Modification of urinal press cock to reduce water consumption by fixing rubber washers.
- Celebration of World Environment Day for awareness creation amongst employees and nearby villages
- Celebration of Kirloskar Vasundhara International Film Festival for society environmental awareness creation
- Plantation of 1211 number of trees at plant on World Environment Day

#### Occupational Health initiatives

- Organized Blood donation camp
- Organized program on stress management and HIV/AIDS awareness
- Annual medical check-up for all employees

#### Safety Initiatives

- Annual Safety Audit
- Safety Awareness for employees
- Conducted road safety awareness campaign

## KHADKI PLANT

### Environment initiatives

- Installation of New stacks as per statutory requirements for additional captive power genset.
- Use of fly ash bricks for civil work

### Occupational Health initiatives

- Blood donation camp
- Periodical Medical examination of all employees
- Organized International Yoga Day

### Safety Initiatives

- Celebrated Safety Week
- Organized lecture on fire fighting.
- Addressed near-misses in communication to employees.

## NASHIK PLANT

### Environment initiatives

- Celebration of World Environment Day
- Celebration of Kirloskar Vasundhara International Film Festival for society environmental awareness creation
- Tree Plantation

### Occupational Health initiatives

- Yoga awareness session on International Yoga Day
- Annual Medical Checkup
- Lecture on health topic - Diabetes, Ergonomics and Heart Disease
- Blood donation Camp
- Tetanus Immunization

### Safety Initiatives

- Display of safety instruction at Maingate for visitors to create awareness
- Training and authorisation of operators for material handling equipment
- EHS and Firefighting training

## BHARE PLANT

### Occupational Health initiatives

- First Aid Training for employees
- Annual medical check-up for all employees

### Safety Initiatives

- Safety Awareness for employees
- Conducted mock drill for emergency preparedness plan
- Training and authorisation of operators for material handling equipment





# KMW PLANT

## Environment initiatives

- Tree plantation on environment Day
- Reuse of treated water for flushing in toilets.
- FRP coating for RSD tank.
- Reconditioning of UV water system

## Occupational Health initiatives

- Blood donation camp
- Periodical Medical examination of all employees
- International training for employee on Heart attack

## Safety Initiatives

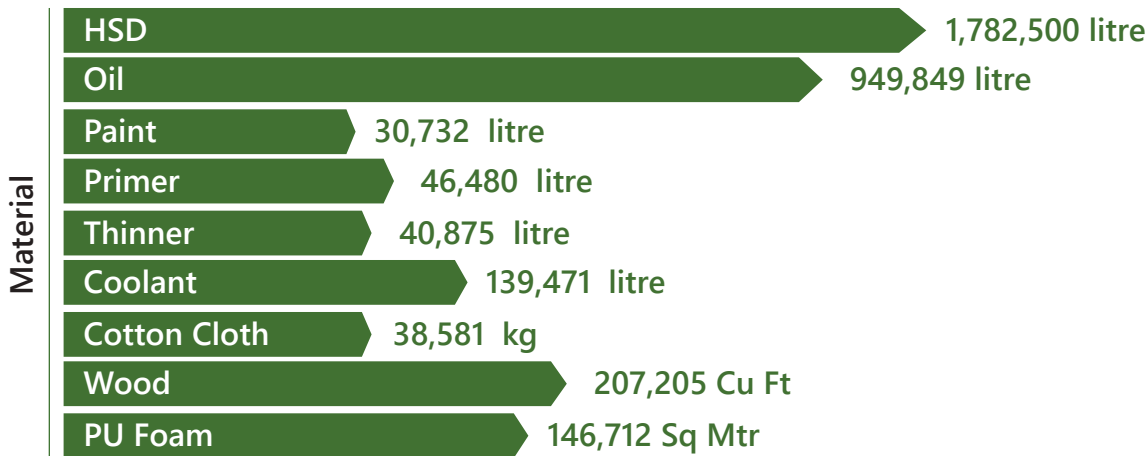
- Daily safety walk. ( Accident free Days 1081 Days )
- Shifting of fire Hydrant system.
- Safety Awareness for employees
- Conducted mock drill for emergency preparedness plan
- Training and authorisation of operators for material handling equipment.

## Material

(GRI 301-1)

KOEL's raw materials and components (spares required in company products, which are manufactured by other OEMs) include – components, non-ferrous metals, steel and steel strips and others.

Non-renewable raw materials consumed:



Other non-renewable materials (consumables used in production or part of finished products) = 182,393 ton  
All of these materials were purchased from OEM and other suppliers / dealers.  
KOEL also recycles plastic bags and covers used in packaging.





Energy

(GRI 302-1, 3, 4)

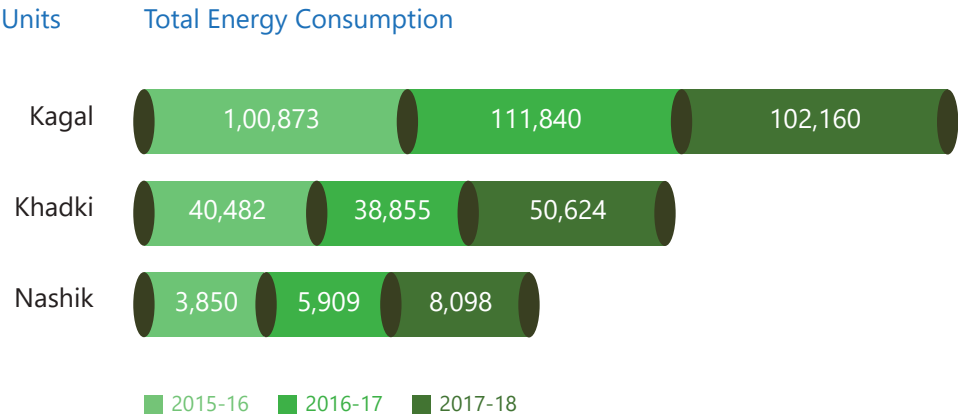
KOEL is committed to optimizing use of energy in operations and to also bringing about continuous improvement in processes and products through use of energy efficiency interventions and renewable energy technologies.

Plant wise non-renewable fuels consumed (GRI 302-2)

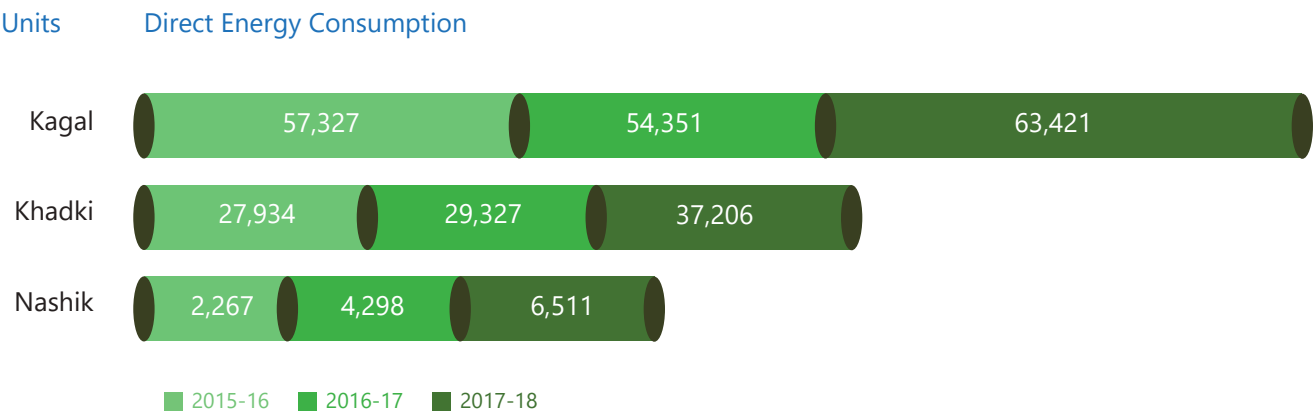
Fuels consumption			
		Kagal	Khadki
		Nashik	
	FO (kl)	58.3	0
	diesel (kl)	1,295	939.55
	LPG (ton)	195.03	0
			6.3

The fuel consumption is taken from the daily stock changes, issuance logs from stores and matched with purchase records for the year.

Total Energy Consumption (GJ)

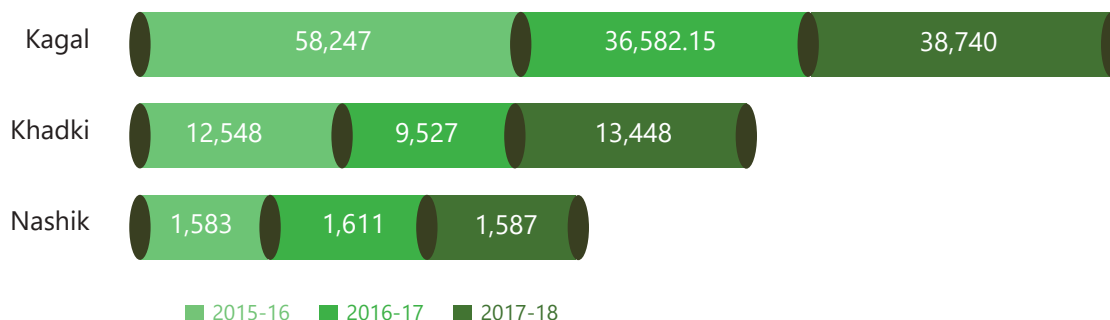


Direct Energy Consumption (GJ)



## Indirect Energy Consumption (GJ)

## Units Indirect Energy Consumption



## Renewable Energy:

KOEL has been using renewable energy from own wind mills till 2016 and solar and wind energy brought via open access now. In the reporting period, budget allocation and project initiation is completed for a 5.5 MWp solar power plant in Kagal unit premises. It includes roof top, ground mounted, fixed axis and moving axis solar panels.

	Kagal	Khadki
Type of renewable energy		
Electricity from open access (MWh)	6,099	696
Biogas (m3)	5,880	0
Solar heaters (ton steam)	16.8	0

## Steps taken for energy conservation and its impacts:

## Kagal Plant

- Elimination of electrical heaters for component washing machines by replacement of washing chemical
- Energy cost reduction through elimination of electrical heaters by utilization of solar energy for heating of washing tank water at medium engine paint booth
- Installation of biogas generator for powering streetlights to use excess biogas,
- Installation of energy efficient substitute (Vaayu-Mig 24) to conventional AC at Tool room
- Implementation of 44 numbers of Energy conservation projects at Machine shop, Assembly, Maintenance and ME departments

## Khadki Plant

- Adoption of LED streetlights (72W, 85 numbers)
- Reduction of Contract Demand from 3500KVA to 1500KVA.
- Installation of occupancy sensors for toilets.
- Celebrated ENCON day and ENCON week by arranging various competitions, display and discounted rate sale of solar products and LEDs.
- Organized Lecture on 'ENCON at work place and at Home and Energy auditing'
- Walk through Energy Audit.

- Installation of Capacitor for power factor improvement
- Replacement of higher energy consuming pump with lower energy consuming efficient pump at SL90 test bench
- Installation of Timers for street lights
- Adoption of hi-bay LED lamps in place of metal halide lamps

## Kaqal Plant

- Installation of 5.5 MW Solar PV plant in order to reduce dependency on MSEDCL grid, save on cost of energy and to move towards carbon neutral factory
- Washing of component at normal temperature instead of use electric heaters
- Installation of Solar water heating system for paint booth
- Use of excess biogas for lighting streetlights
- Installation of energy efficient equipment (Vaayu-Mig- 24) in place of conventional AC at Tool Room

a. Planned

- 50% of electrical consumption should be met by Renewable
- 5.5 MWp Solar Power Plant
- Solar Hot Water System for ME Paint booth
- Elimination of Electrical Heaters for Component Washing Machine
- Vaayu Air Conditioning System
- KP 2 Biogas Generator
- Replacement of GI sheets with Transparent Polycarbonate sheets

## KMW Kaqal Plant

- Installation of Energy Efficient LED lighting in Engine and Power Tiller assembly area, Stores, Office and parking area.
- Installation of Occupancy Sensor in office area
- Installation of air compressor in parallel with existing compressor in manufacturing process

a. Retrofit devices/Energy efficient devices selected/installed

- 5.5 MWp Solar Captive Power Plant
- Adoption of water saver nozzles
- New centralized centrifugal compressor
- Energy efficient painting system to minimize wastage of paint and compressed air consumption
- Retrofitting of VFD for reciprocating compressors to eliminate unload power consumption
- Replacement of motors with energy efficient motors
- Adoption of computerized spare part storage system to minimize space, material handling and manpower
- Adoption of servo motor with drive in place squirrel cage induction motor to save on energy cost
- Modification of flooring of existing buildings to reflect maximum natural light

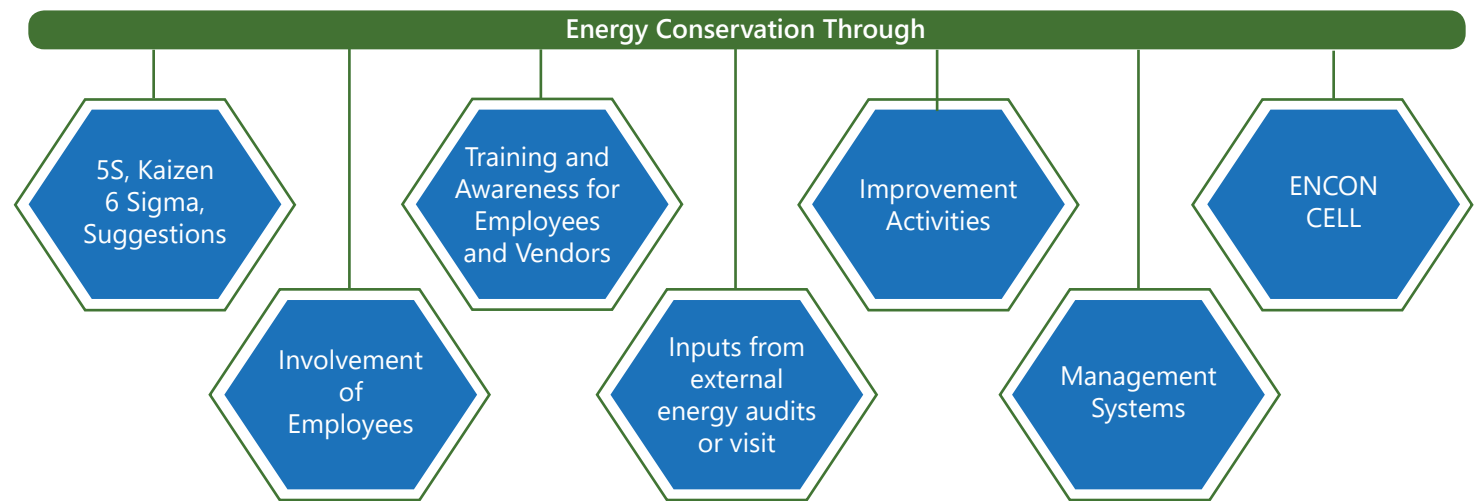


a. Nashik Plant

- Installation of Capacitor for power factor improvement
- Replacement of higher energy consuming pump with lower energy consuming efficient pump at SL90 test bench
- Installation of Timers for street lights
- Installation of hi-bay LED lamps in place of metal halide lamps at shop floor
- Replacement of Cooling Tower transfer pump 50 Hp. By 10 Hp. pump.
- Optimization of Engine Testing Hours

Total capital investment of ₹ 1.44 Crore was undertaken for energy conservation

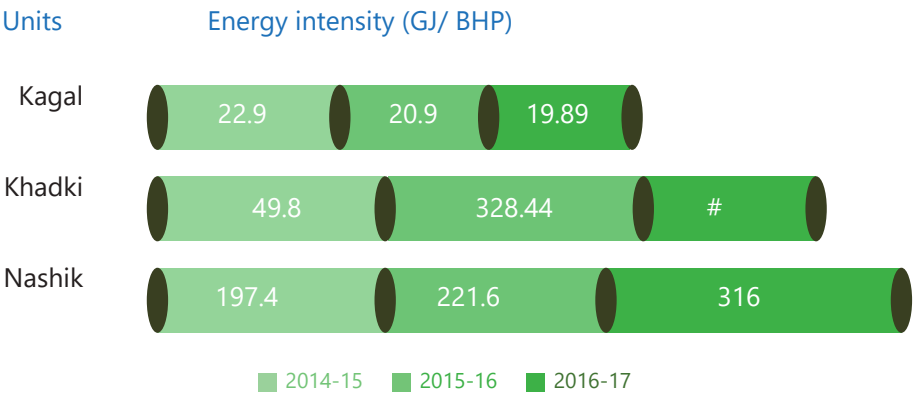
Ways of energy conservation:



E. Pune Plant:

- Solar system installed for heating washing media for Canteen dishes and utensils

Energy Intensity



# not comparable due to shifting of production plant/s  
\$ not comparable due to significantly lower production



## Retrofit devices/Energy efficient devices selected/installed

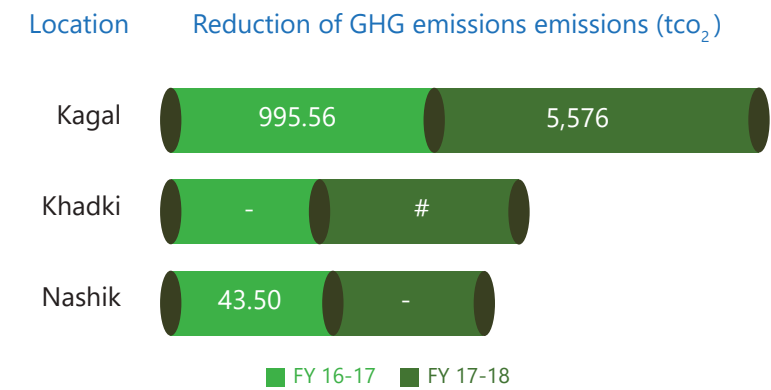
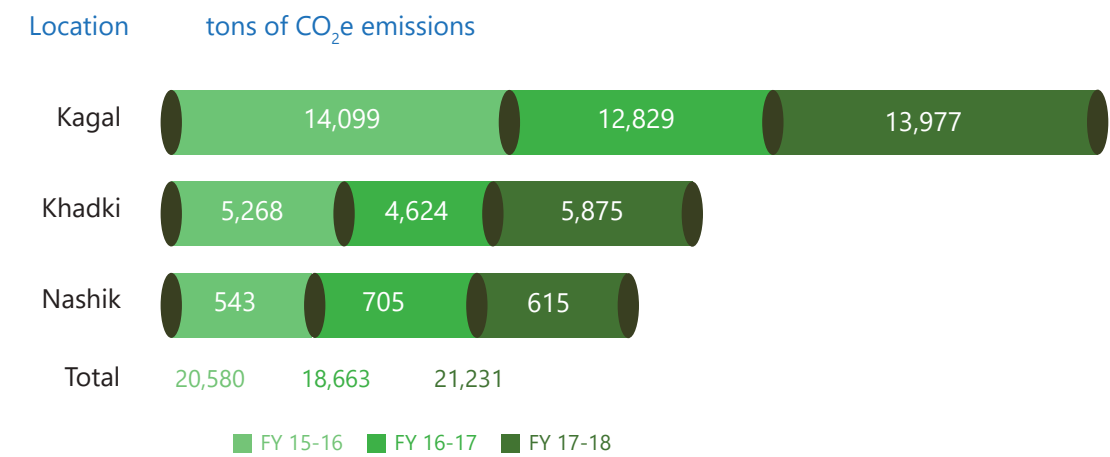
- Used LEDs for new facilities provided for CRE.
- Installed/commissioned energy efficient Air Conditioning system (VRF) during renovation and expansion of CRE.
- Chiller based air conditioner units installed in Test bed area.
- Used Pneumatic pumps for fuel transfer, which operates on pressure feedback.
- Provided common engine exhaust blowers with EE motors.
- Introduced close loop system for Engine Testing. No separate pumps are required for Cooling Towers.

## Awareness Programs:

- ENCON Oath was administered on 14<sup>th</sup> DEC 17, by KOEL's JMD Mr Deshpande R.R. Employees at Pune plant took part in program
- Later JMD sir addressed employees and appealed to initiate ENCON activities at work as well as at home
- Mr. Aghav, AVP-CRE briefed on company's ENCON focus during development of new products.
- Mr Gore-President of Union, promised increased contribution towards ENCON activities.
- ENCON Awards
- Energy Conservation day celebrations

## GHG emissions

(GRI 305-5)



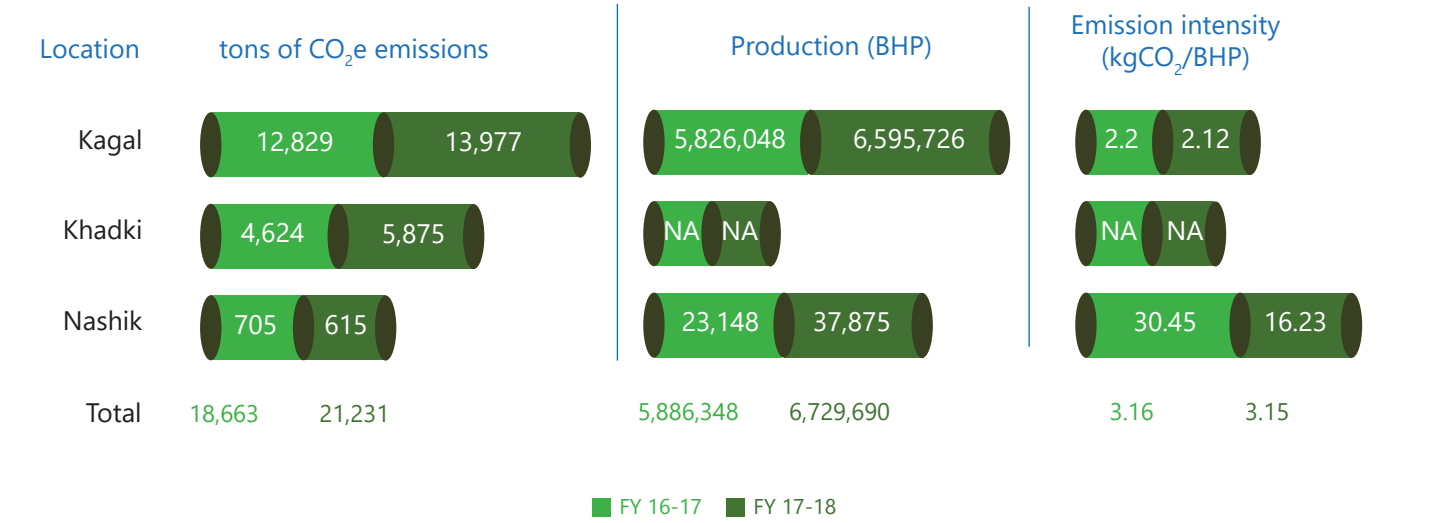
The reduction in GHG emissions is calculated from the estimated energy savings compiled for various energy saving initiatives in 2016-17. These include energy savings expected from both the Scope 1 and Scope 2 emissions compared to the baseline (business-as-usual scenario). Only CO<sub>2</sub> is considered in the calculations of GHG reductions as other emissions are insignificant.







Carbon Offsets at the Kagal Plant:



**Project: Conservation of Energy**

KOEL is committed towards reducing energy wastages and optimum usage of electricity by making changes in technologies and process. Other than this, KOEL understands the disadvantages of using energy generated from non-renewable sources and is slowly shifting towards renewable energy. KOEL has installed renewable energy plants at its Kagal and Kahdki plants. Other measures taken up include installing energy efficient LED lightings, variable frequency drive for motors and energy efficient ventilation systems and chillers at its plants. KOEL has made a capital investment of 1.44 crores towards energy efficient equipment. It is because of these efforts that the company has received several awards from several agencies like CII and MEDA.

**Plants where Implemented:** Khadki Plant, Kagal Plant, Nashik Plant, Rajkot Plant, Bhare Plant

**Renewable Energy Use:** Apart from the aforementioned steps, KOEL has also taken many initiatives in reducing its dependence on fossil fuels by switching to renewable energy. For this purpose, procured electricity from renewable energy plants (wind and solar) through open access for both Kagal and Khadki plants.

**Outcome:** Company's efforts in this direction have lead to consumption of Rs. 57.21 Lacs Windmill Units and maintain 37% green energy share at Kagal Plant. Similarly Rs. 6.96 Lacs Windmill-Solar Units were consumed at Pune plant leading to 16% green energy contribution of total energy consumption.

**Targets for FY 18-19:**










For FY-1819:

- Kagal plant will receive 50% of renewable energy out of total electrical consumption with the new 5.5 MWp Solar Power Plant
- Due to obligations from MSEDCL, Khadki plant will not opted Open access renewable energy purchase
- Other renewable options for Khadki, Nashik, KMW and Bhare plants will be evaluated and implemented
- As directed by JMD, Offset due to trees planted will be calculated in the next report

**Water**

(GRI 303-1, 3, 306-1, 5, 302-2)

Total water withdrawn (m<sup>3</sup>)

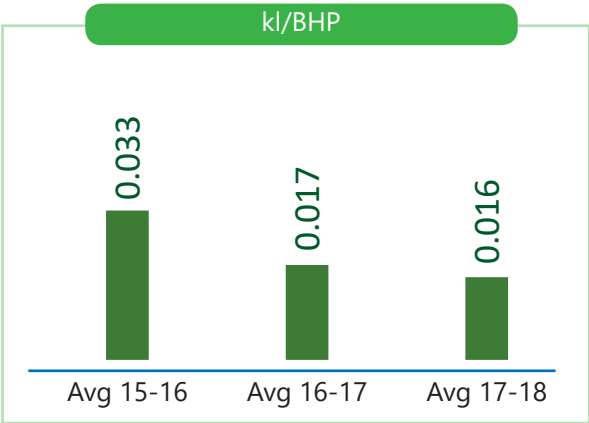
Units	Source	Water withdrawn (m <sup>3</sup> )		
Kagal	MIDC (from river and dam)	 1,41,931	 100,435	 108,698
Khadki	Municipal Corporation (from dam) + tubewell	 56,239	 49,173	 60,421
Nashik	MIDC	 14,684	 9,604	 14,071

■ 2015-16 ■ 2016-17 ■ 2017-18



The water consumption is taken directly from the meter readings noted and water bills received from suppliers. The water withdrawal does not have significant impact on sources and water bodies as water consumption by KOEL is insignificant compared to total source reservoir.

Further, various water saving projects are implemented including major rainwater harvesting initiatives at Kagal. This has resulted in significant specific water conservation savings.



Notheworthy water efficient



Harvested rainwater is reused after filtration process

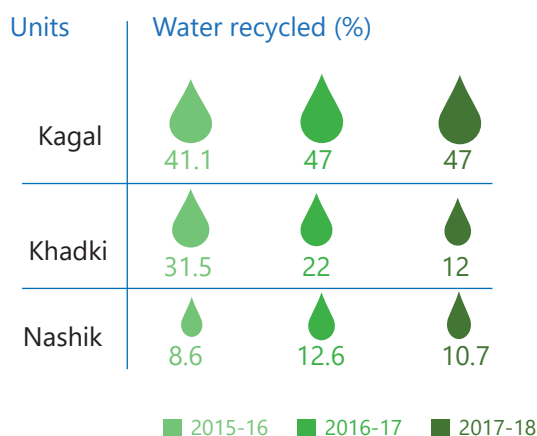


Dr. R.J. Rathi Award

Total water recycled and reused (m³)

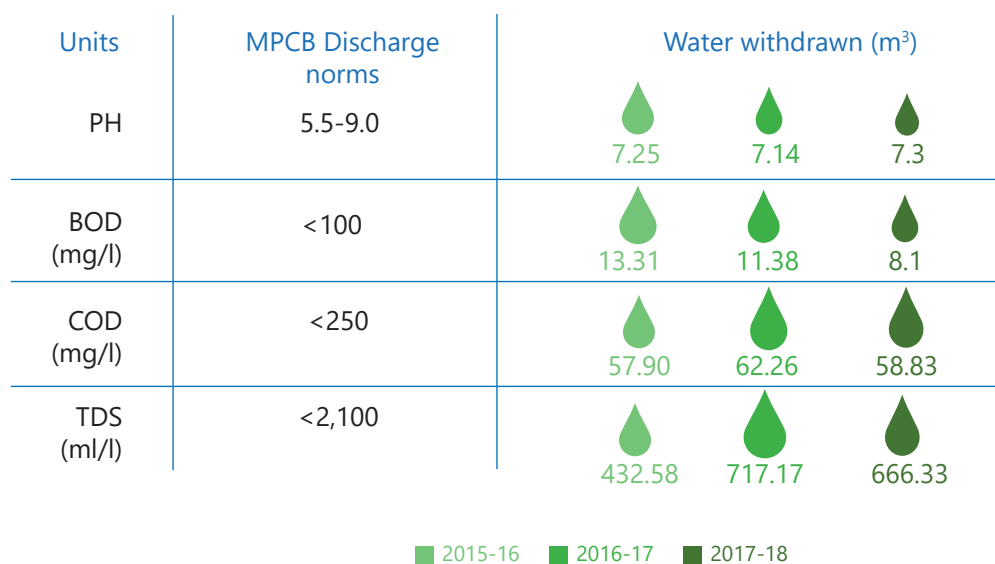
Units	Water reused and recycled		
Kagal			
	58,267	47,497	50,725
Khadki			
	17,705	10,815	7,264
Nashik			
	12,308	1,209	1,504
<div><div></div> 2015-16<div></div> 2016-17<div></div> 2017-18</div>			

The water treated in ETP is used for gardening and flushing toilets etc. and all plants maintain compliance to zero discharge.



All three plants are zero effluent discharge compliant. So, the treated effluent is used within premises, for gardening. Thus, KOEL's water discharge and runoff had no adverse impacts on protected or water bodies and habitats having biodiversity value.

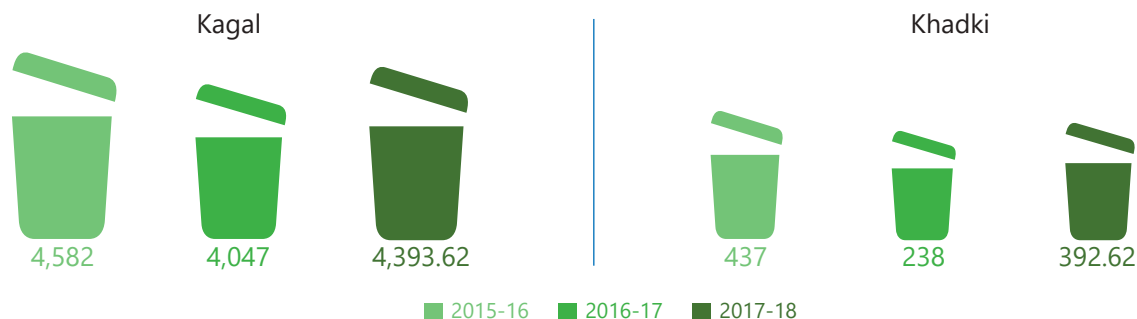
#### Sample Water outlet data at ETP outlet for Kagal plant



## Waste

(GRI 306-2, 3, 4)

#### Total non-hazardous waste generated (MT)



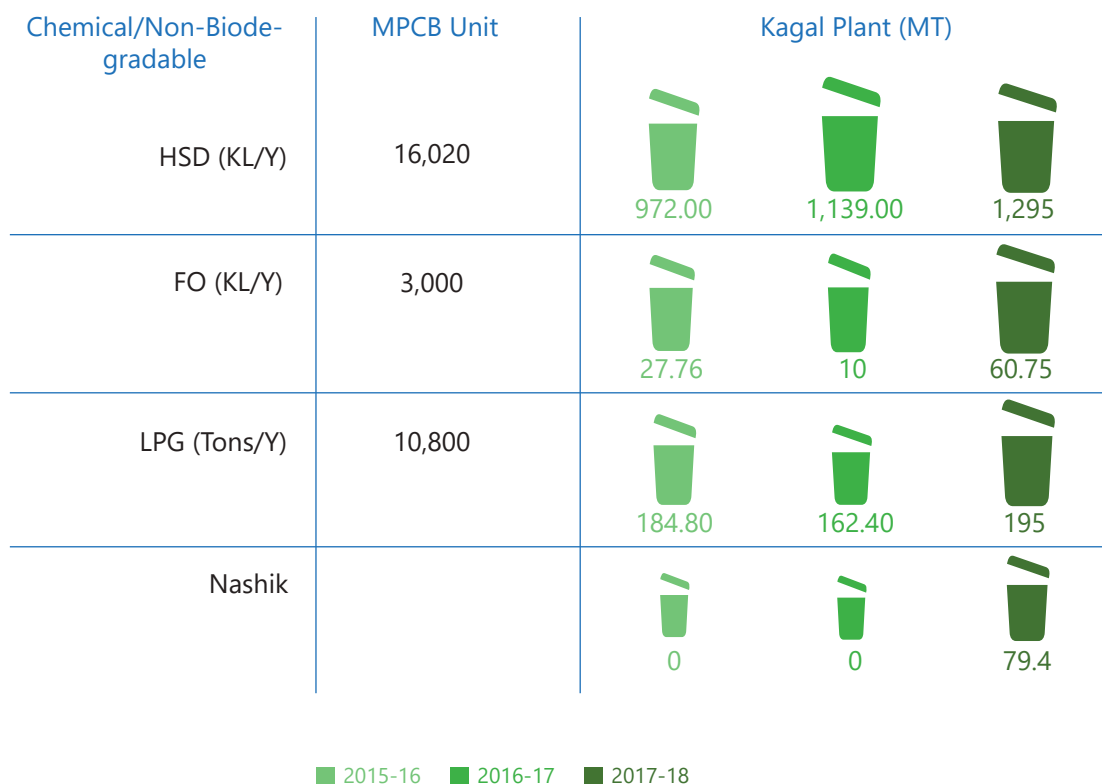
## Hazardous waste monitoring for Kagal Plant

Type of waste	Annualise MPCB Unit	Kagal Plant (MT)		
Paint Sludge (MT/Y)	92.4	 49.54	 48.84	 61.44
ETP sludge (MT/Y)	552	 99.47	 94.68	 114.31
Waste and Used oils (KL/Y)	2,028	 304.52	 298.33	 248.03
Used/ Scrap Batteries (Kg/Y)	9,600	 0	 0	 0
Ferrous Metal Scrap (MT)	5,160	 2,511.17	 2,600.07	 3,019.07
Wooden Scrap (MT)	937.56	 561.67	 503.90	 491.04
Rubber Plastic (MT)	1,404	 578.99	 519.65	 800.47
Grinding Dust (MT)	252	 83.64	 42.37	 83.04

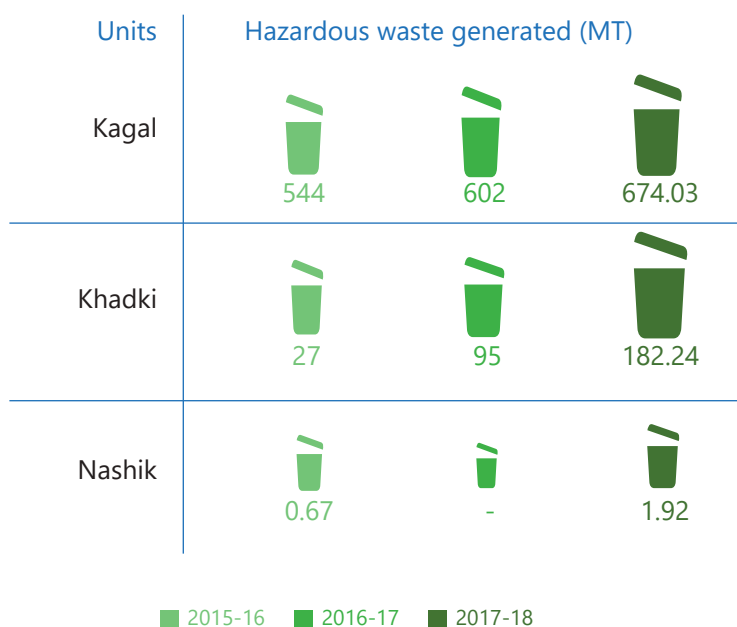
■ 2015-16 ■ 2016-17 ■ 2017-18



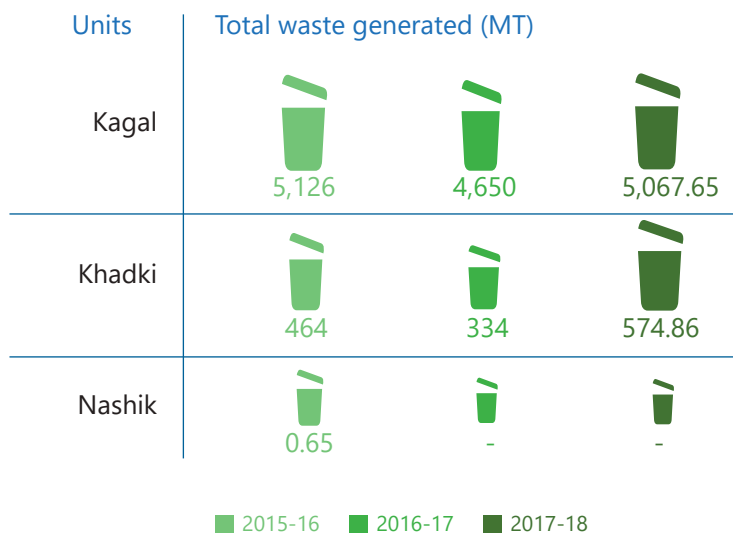
## Hazardous Chemical/ Non Biodegradable Material - Kagal Plant



## Hazardous waste generated (MT)



## Total waste generated (MT)



Hazardous Waste	Tracking	Yearly summary
-- Used /Spent Oil ( 5.1)	KL/M	0.18
-- OSW, Waste oil ( 5.2)	KL/M	9.46
-- Sludge from bath cont solvent ( 12.4)	KL/M	0
-- Liquid Nitriding Sludge (14.1)	MT/M	0
-- Paint Sludge ( 21.1)	MT/M	2.54
-- Steel Barrels, containers (33.3)	Nos/M	227
-- Plastic Barrels, containers (33.3)	Nos/M	128
-- ETP sludge ( 34.3)	MT/M	3.94
-- Asbestos roofing (15.2)	MT/Y	14.87
-- E Waste	MT/Y	5
-- Batteries ( Lead Acid)	Nos/M	1.63
NON-Hazardous waste	Tracking	Yearly summary
-- Metal Scrap	MT/Y	94.97
-- Wooden Scrap	MT/Y	34.33
-- Paper, Plastic, Packaging scrap	MT/Y	51.29
-- Grinding Dust	MT/M	0
-- Glass Wool	MT/M	1.65
-- Foundry Ash	MT/M	0
-- Foundry Dross	MT/M	0

KOEL does not deal with (import, export or ship internationally) any hazardous waste which violate provisions of Basel Convention.

## Recycling

(GRI 301-2)

There is not much scope for recycling in the industry in which KOEL operates. However, KOEL has been practicing recycling wherever possible. Some products like DG sets are reconditioned to improve efficiency and extend their service life. In 2017-18, KOEL has reconditioned 13 Chotta Chilli DG Sets. Further, the lube oil used in all KOEL’s manufacturing facilities is recycled via certified oil recyclers. In 2017-18, KOEL recycled 3,96,432 liters of lube oil. KOEL also recycles plastic bags and covers used in packaging. In 2016-17, KOEL recycled packaging materials worth Rs. 1.5 Crores. The product reclamation is also not practiced in this industry formally.

## Emissions

(GRI 305-7)

KOEL carries out emission monitoring with ambient air samples once every six months. The regulations do not mandate continuous flue monitoring at KOEL’s plants. All emission parameters were found to be within stipulated limits as prescribed by respective SPCB and CPCB. There was no show cause notice issued by any authority for any of the KOEL’s plants for any violation of pollution limits.

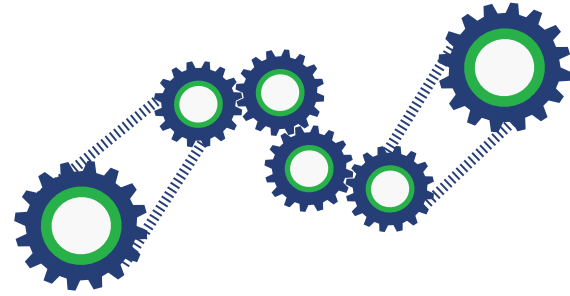
In the reporting period, there has been no significant environmental impacts due to transportation of goods for organisation’s operation and transporting members of workforce. There were no incidents of significant spills in the reporting period.

KOEL has clearly defined HSE plant objectives such as Energy Conservation [ENCON], reduction in Hazardous substance. The Hazardous wastages are disposed as per SPCB guidelines. It is being monitored as per ISO 14001 and OHSAS guidelines. All the plants maintain zero water discharge and do not have any onsite energy generation (compared to Kagal – using engines). Thus, ambient air quality is shown as sample for Kagal plant only. All the plants maintain ambient air quality well within the limits from pollution control consents.

KOEL has waste treatment plants to process effluent and domestic sewage. The quality of treated water is well within the statutory limits set by pollution control board and is reused for gardening. The qualitative values can be referred in following Table.



# 10 PRODUCT STEWARDSHIP



(GRI 416-1, 2, 417-1, 2)

KOEL has proper systems in place to ensure highest level of safety, quality and environment friendliness of products. KOEL is committed to minimizing any potential negative social or environmental impact of its products during its entire life cycle. Sustainability is an important factor that is considered while designing of products. It emphasis development of products that have minimum consumption of resources during its entire life cycle. The Standard Operating Procedures (SOP) of the company have been designed in a way that everyone is aware of their environmental and social responsibilities.

KOEL uses various display labels on the products and spare parts to inform customers about these products. KOEL also provide Operations and Maintenance (O&M) manuals of the respective products in conformity with relevant labeling requirements. Other than this, all products are given certain Do's and Don't's guidelines, regulatory approval certificate reference along with user manual and spares code numbers.

KOEL's products have received a variety of certification like FMUL (Factory Mutual Underwriters Laboratory). KOEL's operations adhere to and are certified for ISO 9001 and all manufacturing units are certified for adherence to ISO 14001 and OHSAS 18001.

## Product and services

The wide range of products that KOEL has are significantly used in sectors that are drivers of economy in the country. These include sectors like infrastructure, real estate, construction, mining, factories, retail, hospitality, telecom and agriculture. KOEL's product line includes products like portable gensets, large gensets, industrial engines, agricultural pumps and engines etc. There have been no substantiated complaints received concerning breaches of customer privacy. Also, there were no significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.

## Product Responsibility

KOEL has proper systems in place to ensure safety, quality and sustainability of its products. All its products go through required regulatory approval process and are introduced into the market only after proper procedures are followed. Also, the company provides useful user instructions on its manuals and labels put on products to enable safe use of products.

## Customer health and safety

KOEL has a dedicated network of marketing and sales officers in India and other countries who take proper feedback from customers and provide valuable inputs to the company. KOEL's MD, JMD and other Business Unit Heads visit some selected domestic and overseas customers to gather appropriate inputs regarding the products and its use for strategic positioning of the products and rectify the faults identified. Such systems helps the leadership to know the customer's actual perception on the product's quality and service.

All (100%) of significant product and service categories are assessed for improvement for which health and safety impacts may be expected. This is done as part of the design criteria, routine O&M as well as the specific servicing requests received. There were no cases of non-compliance concerning the health and safety impacts of products and services as well as product and service labelling.

KOEL has a publicly available privacy policy and had mad elaborate internal data management protocols. Further, there were no complaints concerning breaches of customer privacy and losses of customer data. There were also no incidents of non-compliance concerning marketing communications.

(GRI 417-3, 418-1, 419-1)

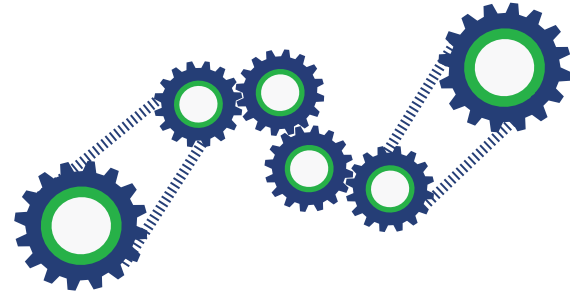




Figure: DG set showing various labels on product information and safety



# 11 HUMAN CAPITAL DEVELOPMENT



## (GRI 404-3)

KOEL has specific policies and procedures in place to retain and manage its talent at an optimal level. KOEL has clear marked up positions in all BUs and functions across the company and the competencies required for unique positions are well defined. KOEL has identified critical positions and the likely successors and have a process to internally identify the development needs and given the required exposure and training. A skills gap mapping exercise is conducted to identify the skills required for particular role. The results of this exercise is used to impart relevant skills to people at critical positions. KOEL carries out an Employee Engagement survey every alternate year through an independent assessing agency. Based on the gaps that emerge, teams are formed to address specific areas of concern. The employees of KOEL work in an environment where the core values are imbibed into them which is reflected in their behavior at workplace and outside. All (100%) of KOEL's employees receive regular performance and career development reviews. These reviews are online done quarterly and annual.

KOEL organizes award and recognition program - 'SAMMAN' for the employees. It was revamped this year to better foster the culture of acknowledgement and recognition in the company.

KOEL has always considered employees as its most valuable resource. This is essential for sustainable operations of the company. KOEL takes measures to address the issue of work life balance of employees and also encourages employees to maintain the same. KOEL has introduced several policies to ensure that it happens. Some of them are provisions for flexible timings, compulsory 15 days annual leaves, extended maternity leaves for women and provision for leaves on birthdays. KOEL also conduct annual health check-up for employees. This is followed by necessary corrective and preventive actions. KOEL also provides scholarships for employee's children.

Female employees are treated on par with male employees at KOEL. They receive the same wage as their male counterparts. The ratio of entry level salary is 1:1 after which all are given a fair chance to grow in the company. Also, all employee are paid more than the minimum wage requirement.

### Ratio of basic salary and remuneration of women to men G4-LA13

KOEL has a policy of equal opportunity for all its employees in all aspects. It provides equal remuneration to both male and female employees and equal opportunities to grow in the organization irrespective of gender, caste or religion.

## (GRI 405-2)

Basic Salary (ratio of women to men)	0.74
Total Remuneration (ratio of women to men)	0.74





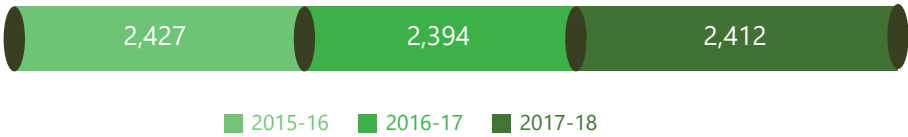
Project: Samman and BaatCheet

KOEL has revamped its entire reward and recognition system under the brand name ‘Samman’. With this new system in place, there are now regular rewards and recognition ceremonies held across the plants on monthly, quarterly and annual basis. Through ‘Samman’, the company not only tries to acknowledge and reward the most efficient and hardworking employees but also provides them an opportunity to develop and grow.

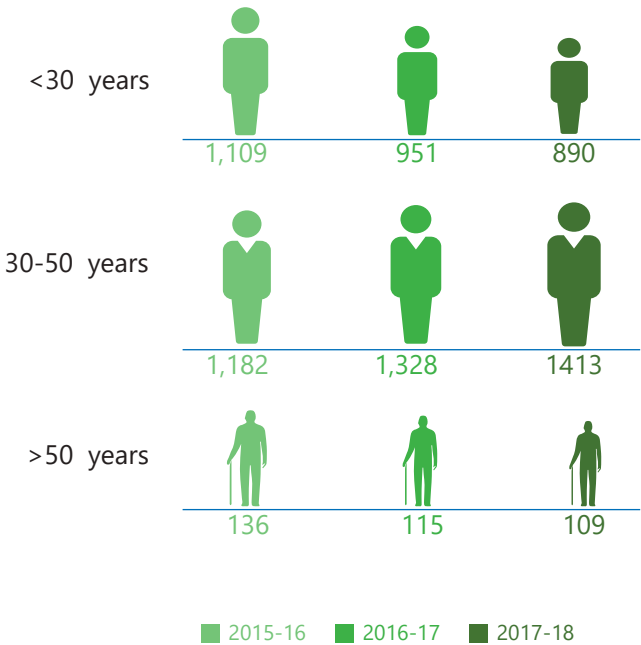
KOEL also re-launched its quarterly magazine ‘BaatCheet’ on digital platform. This has been done to develop a channel for regular and accurate communication with employees and also for aligning employees’ interest with the Company’s business objectives.

**Outcome:** Through this initiative KOEL hopes to develop better resource stewardship and better employee and management communication. These initiatives are expected to bring about transparency in company’s business activities and provide right platform for nurturing and mentoring its resources better.

Total Workforce

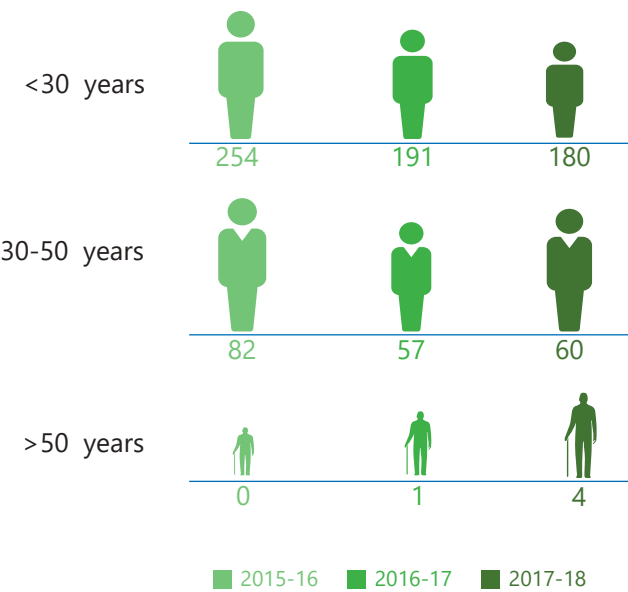


Employee Diversity (by age group)



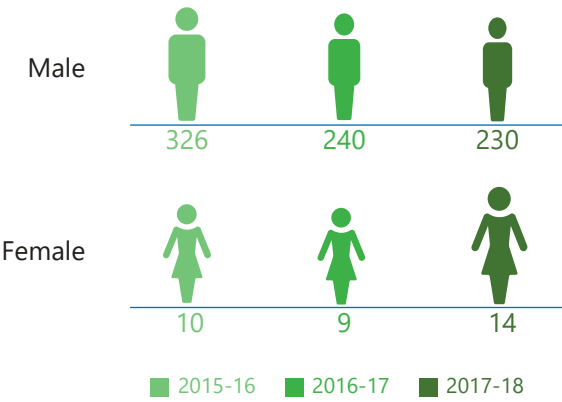
# New employees hired by age group

New employees hired by age group



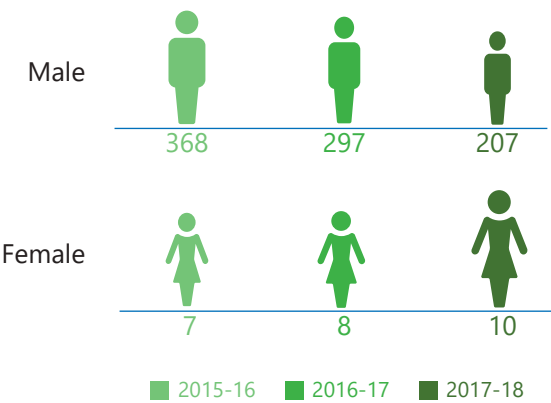
# New employees hired by gender

New employees hired by gender



# Employee turnover by gender

Employee turnover by gender



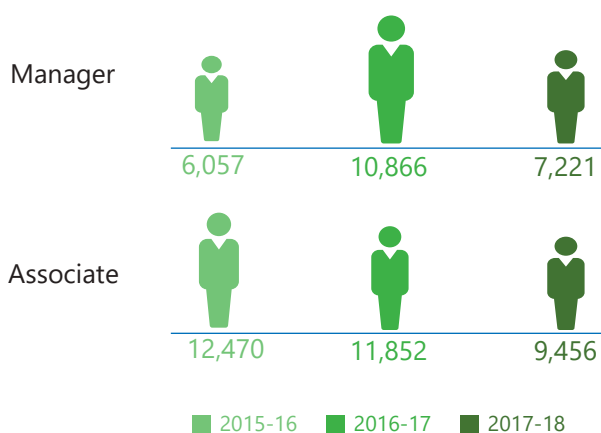
## Training and Education

(GRI 404-1, 404-2, 102-8, 401-1, 414-1)

### 1. Kagal

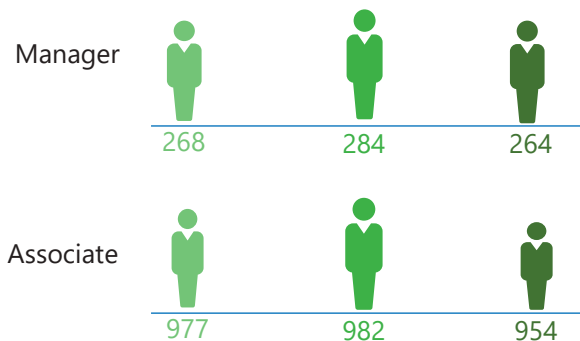
#### Training and Education

Total no. of training hours- by employee category

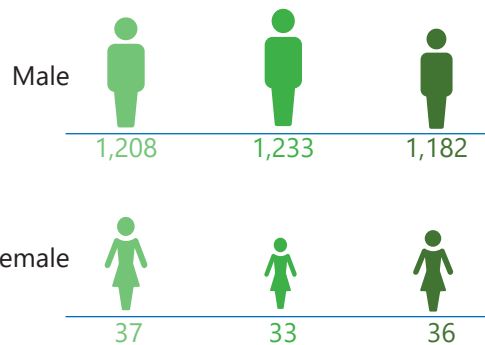


#### Average training hours

No. of employees received training  
- by employee category



No. of employees received training



■ 2015-16 ■ 2016-17 ■ 2017-18

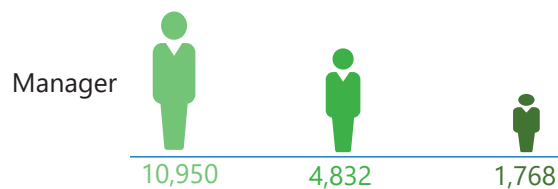
Employee category	Number of Employees	% Trained on Safety	% Trained for Skill upgradation
Permanent	1,150	52%	70%
Permanent Female	35	37%	65%
Temporary/ Contractual	1,000	90%	30%

Note: For skill up gradation, only Gurukul trainings for 2017-18 are considered.

## 2. Khadki

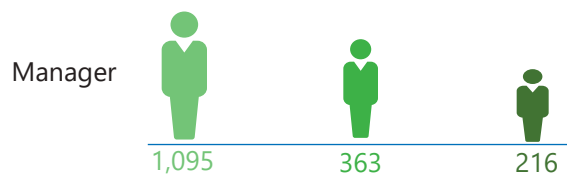
### Training and Education

Total no. of training hours- by employee category



### Average training hours

No. of employees received training - by employee category

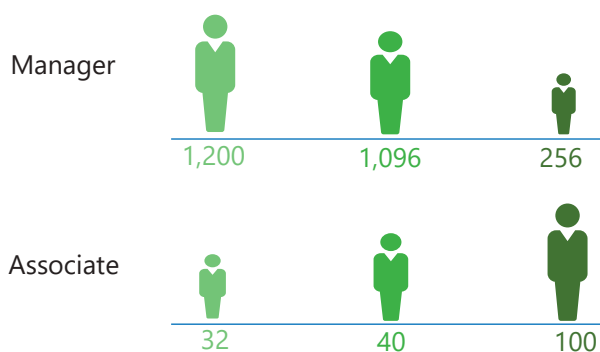


■ 2015-16 ■ 2016-17 ■ 2017-18

## 3. Nashik

### Training and Education

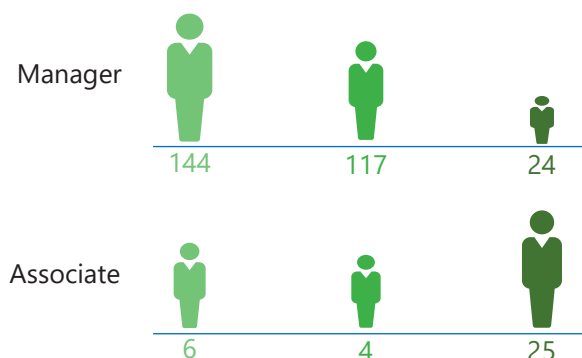
Total no. of training hours- by employee category



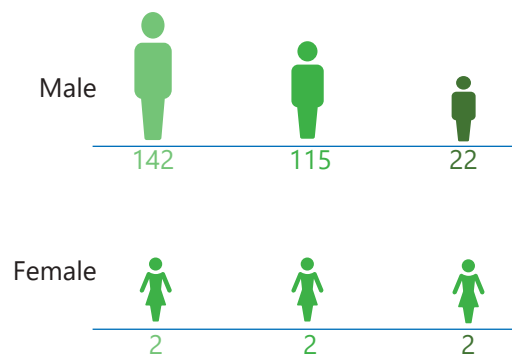
■ 2015-16 ■ 2016-17 ■ 2017-18

### Average training hours

No. of employees received training - by employee category



No. of employees received training

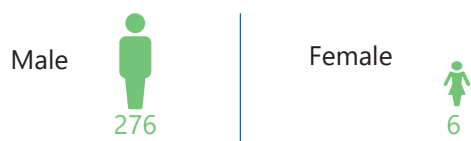


■ 2015-16 ■ 2016-17 ■ 2017-18



Employee category	Number of Employees	% Trained on Safety	% Trained for Skill upgradation
Permanent	93	90%	26%
Permanent Female	2	50%	-
Temporary/ Contractual	124	60%	-

Total no. of trainings – by employee category



#### Platform for People Involvement in improvement initiatives

Project Unlock	Mr Customer	Lakshaya 100
Six Sigma BB	ENCON	Engine Leak-free
Six Sigma GB	TPS	WASH
VA/VE	Supplier Quality Task Force	5S and Kaizen
Quality Circle	Process Audit	Supplier Six Sigma
SAMMAN	AOP Sign-off Offsite Meetings	Coffee with RR

## Benefits provided to full-time employees

(GRI 401-2, GRI 401-3)

#### Employee benefits – Permanent and contract

Parental Leave
Retirement
Life Insurance
Health Care
Disability and invalidity coverage

#### Defined Benefit Plans:

The employee's gratuity fund scheme, pension, post-retirement medical and long term service award benefit schemes are Company's defined benefit plans. The present value of the obligation under such defined benefit plans is determined based on the actuarial valuation using the Projected Unit Credit Method as at the date of the Balance sheet. In case of funded plans, the fair value of plan asset is reduced from the gross obligation under the defined benefit plans, to recognise the obligation on the net basis.

#### Other Long-Term Employment Benefits:

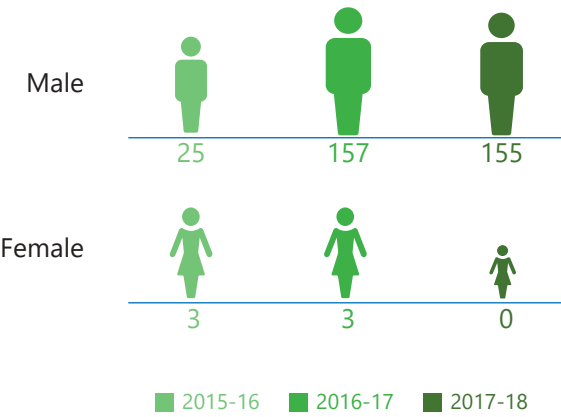
The company has Compensated Absences Plan which is covered by other Long-term Employment Benefits.

These funds are maintained under a registered Trust and there is no other liability to the company.

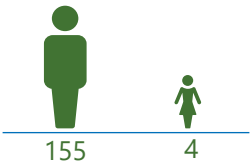
The notice period for operational changes is four weeks in line with the applicable regulations.



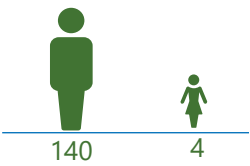
Employees entitled for parental leave



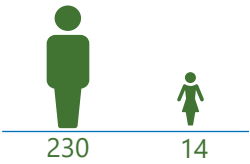
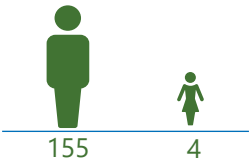
Employees who availed parental leave

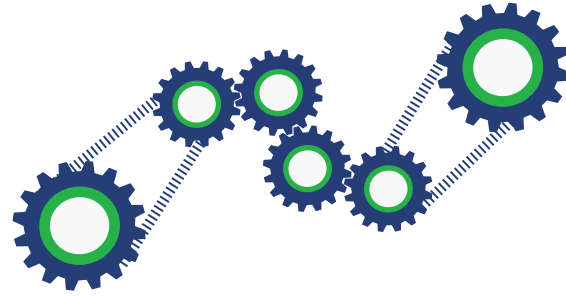


Employees who are still employed for 12 months after joining back



Employees who returned after parental leave





(GRI 406-1, 412-1, 2, 3, 410-1, 411-1, 412-1)

## Promote and encourage equal opportunities:

KOEL considers employees as its most valuable resource and constantly strives for their wellbeing and satisfaction. It is in line with the same, KOEL follows a strong policy of providing equal opportunity to all the employees irrespective of their caste, gender or religion.

The company is in conformity with all the labour laws, human rights directives and other legislations as promulgated from time to time. Company's policies and senior management has been able to create an environment free of bias and progress for all based on their work and capabilities. KOEL administration condemns all forms of child labor and does not practice it in any form.

Equal Opportunity and diversity are promoted and encouraged by KOEL leadership. It makes opportunities equally available to all concerned. For example job rotation opportunities at KOEL are communicated online so that all eligible personnel get equally attempt at available opportunities.

For example- in February 2014, KOEL evolved a comprehensive policy for Prevention of Sexual Harassment of Employees in line with the law passed by the Government of India in this regard. The broad objective of this policy is to ensure that the employees at all levels can work together in an environment free from gender discrimination, violence and harassment on the basis of gender and ensure that all are provided with equal opportunities for expression and progress.

There were no complaints relating to child labour, forced labor, involuntary labour or sexual harassment in the reporting period.

KOEL does not have a standalone human rights policy but various other policy like sexual harassment, child labour, forced labour, occupational health and safety, non-discrimination cover different aspects of human rights. These policies are strictly enforced in the organization because of which there have been no cases of reported human rights violation in the company. This is in recognition of the duty towards the constitution of India which has human rights as an integral principle. Currently human rights aspects are a part of employee induction training. KOEL has proper forums and mechanism like whistle Blower, Ombudsman and Grievance Redressal are in place to report and take effective remedial steps for any human right violation in the company.

KOEL has not come across any instance where in its operations or in its suppliers' domain employee rights to exercise freedom of association or collective bargaining and child labour requirements has been violated or is at significant risk. However, KOEL is not complicit in any violation of human rights in the contractor or supplier premises.

All (100%) of security personnel, including those supplied by third party, are trained in the human rights policies and identification, prevention of child labour. To promote gender diversity and further to enactment of 'Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013', a series of sessions has been conducted by an external agency to cover all employees.

## Code of Conduct

Enforcement of code of conduct is regularly reviewed by various audit committees across the organization. Any employee has the liberty to bring it to the notice of chairman of audit committee any violation of code of conduct in the organization. The Code of conduct covers various aspects like anti-corruption, bribery, mismanagement and unethical behaviour.

## Occupational Health and Safety

(GRI 408-1, 409-1)

KOEL has great regard for employee wellbeing and ensuring employee safety is one of those. KOEL has been taking all possible measures to provide a safe workplace. Regular awareness and training sessions are conducted throughout the year to generate an atmosphere of safe behavior. KOEL have various communication channels to effectively disseminate information to the employees. Some of them are Daily Flow Meeting, Sun Rise Meeting, Gemba Meeting, myKOEL portal, Yammer etc. KOEL has dedicated forums and methods like Kaizens, ENCON, Quality Management, Safety Management, WASH Pledge where initiatives to improve occupational health and safety are conceptualized, planned and deployed. The company has formal agreements with the trade unions covering health and Safety topics such as responsibility of the workers for using PPE, compliance with provisions of Factories Act etc.

During the year, numbers of initiatives were undertaken in your Company's plants and offices in the areas of Environment, Occupational Health and Safety (EHS). Some of the key initiatives are listed below

### Kagal Plant

#### *Environment initiatives*

- Installation of Activated carbon filter and pressure sand filter at ETP for better quality of treated effluent
- Modification of ETP lab for analysis of effluent parameters like BOD, COD, TDS.
- Enhancing the capacity of rain water storage ponds.
- Carry out hydrogeological report for CGWA application.
- Membership of "Maharashtra Green army" from "Government of Maharashtra forest department" for participation in 4crores tree plantation programme
- Utilization of filtered rain water for cooling towers, paint booth and kitchen utensil washing.
- Use of Bio-pesticides for pest control.
- Modification of urinal press cock to reduce water consumption by fixing rubber washers.
- Celebration of World Environment Day for awareness creation amongst employees and nearby villages
- Celebration of Kirloskar Vasundhara International Film Festival for society environmental awareness creation
- Plantation of 1211 number of trees at plant on World Environment Day.

#### *Occupational Health initiatives*

- Organized Blood donation camp
- Organized program on stress management and HIV/AIDS awareness
- Annual medical check-up for all employees

#### *Safety Initiatives*

- Annual Safety Audit
- Safety Awareness for employees
- Conducted road safety awareness campaign

### Khadki Plant

#### *Environment initiatives*

- Installation of New stacks as per statutory requirements for additional captive power genset.
- Use of fly ash bricks for civil work

#### *Occupational Health initiatives*

- Blood donation camp
- Periodical Medical examination of all employees
- Organized International Yoga Day

#### *Safety Initiatives*

- Celebrated Safety Week
- Organized lecture on fire fighting.
- Addressed near-misses in communication to employees.





Nashik Plant

Environment initiatives

- Celebration of World Environment Day
- Celebration of Kirloskar Vasundhara International Film Festival for society environmental awareness creation
- Tree Plantation

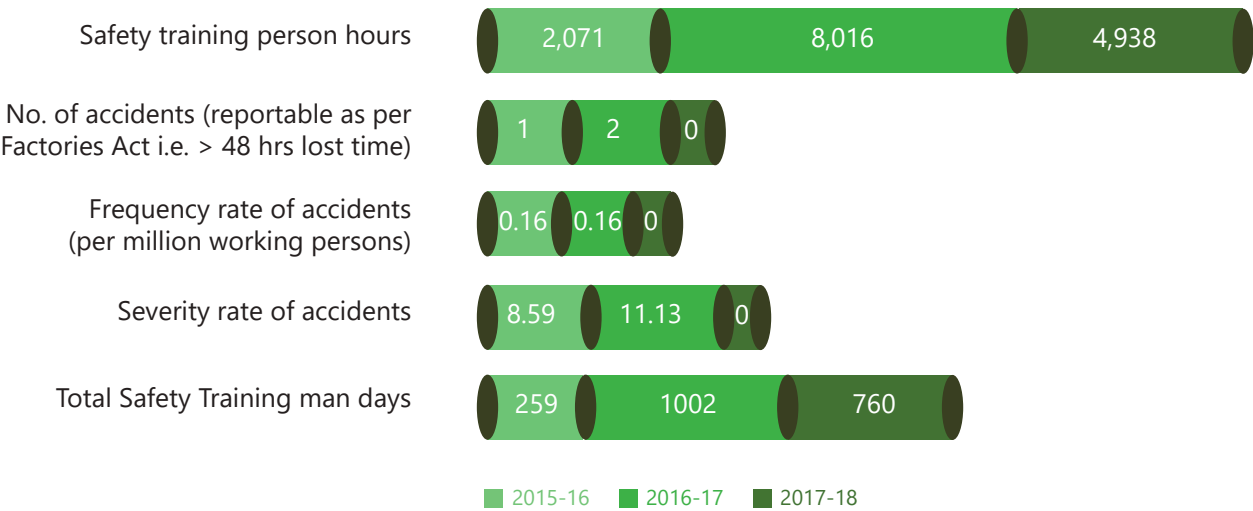
Occupational Health initiatives

- Yoga awareness session on International Yoga Day
- Annual Medical Checkup
- Lecture on health topic - Diabetes, Ergonomics and Heart Disease
- Blood donation Camp
- Tetanus Immunization

Safety Initiatives

- Display of safety instruction at Main gate for visitors to create awareness
- Training and authorisation of operators for material handling equipment
- EHS and Firefighting training

Safety training hours, no. of accidents, Frequency rate, severity rate





Plant	Safety Initiatives in 2017-18
Kagal	<ul style="list-style-type: none"> <li>• Road Safety Awareness for employees</li> <li>• Conducted mock drill for emergency preparedness plan</li> <li>• Training and authorisation of operators for material handling equipment</li> </ul>
Nashik	<ul style="list-style-type: none"> <li>• Display of safety instruction at Main gate for visitors to create awareness</li> <li>• Training and authorisation of operators for material handling equipment</li> <li>• EHS and Fire Fighting Training for employees</li> </ul>
Pune	<ul style="list-style-type: none"> <li>• Safety Awareness for employees</li> <li>• Conducted mock drills for emergency preparedness plan</li> </ul>

- Behaviour based safety (BBS) trainings
- National Safety Week and Road Safety Week – various awareness programs, contests and quiz competition
- Recognition and awards for safety suggestions and practices – Star Gallery, Safety Star
- Contract employees are also included in all safety trainings, including drivers for contracted buses and smaller vehicles

Corporate Safety Department has developed and implemented 'On-line Accident Reporting System' (ARS) for better access and quick communication of accidents across locations. The system is live on IMS portal (previously EHS portal) along with location wise number of accidents data and graph. Anyone across KOEL having access to myKOEL intranet portal can have access to this data being updated regularly. The significant benefits of On-line Accident Reporting System is that it doesn't required any hard copy to be generated for internal Accident forms, Real time tracking of status of accidents through myKOEL, Accessibility of accident information to all four factory locations for sharing and safety improvements and enabling to reduce unsafe conditions / acts.

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# Collective Bargaining and Employee Engagement

(GRI 102-41, 205-1, 3, 415-1, 402-1)

KOEL respects and is committed to right to freedom of association, participation and collective bargaining. At every manufacturing plant, a committee addresses the issues raised by employees through grievance redressal mechanism or otherwise.

KOEL has a SAY, STAY and STRIVE policy for its employees. This serves to enhance employee engagement. KOEL conducts employee engagement survey (EES) to measure employee perceptions. Trends and results emanating from the EES survey are carefully analysed and worked upon for remedial and improvement action.

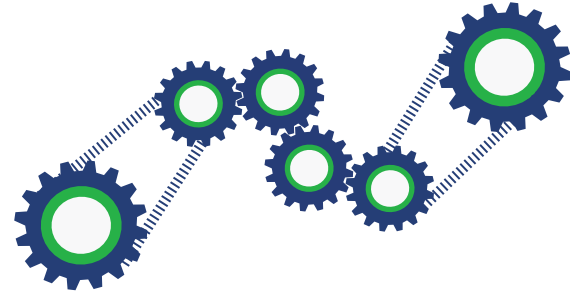
The notice period for operational changes to employees is four weeks and is in line with the applicable regulations. KOEL respects and values human rights. Currently human rights aspects training is provided as a part of employee induction training.

Enforcement of code of conduct is regularly reviewed across organization covering aspects on anti-corruption, bribery and ethics. All (100%) of the operations are assessed for risks related to corruption and the significant risks related to corruption identified through the risk assessment. All new joiners sign code of conduct and critical suppliers-customers are mailed the respective codes along with the PO and annual communications.

All (100%) of the governance body members and all new joiners are required to sign code of conduct annually. The code of conduct includes anti-corruption. As a policy, the company does not make any political contributions.

There were neither any confirmed incidents of corruption nor any complaints received by the Whistle Blower Mechanism.





The senior leadership team of KOEL interacts continuously with various professional bodies like IDEMA, CII, FICCI, ARAI, ACMA, FIFO etc. This helps the company understand the business environment and pre-empt changes in government regulations like emission norms and changes in policy affecting the sector. This helps the company in various aspects like managing risks and new product development.

Apart from this, the company believes in providing right inputs to various regulatory bodies which would be beneficial for the overall sector. With a view to this, the company has been an active member of various industry and trade bodies and participates in various industry events and stakeholder consultation/dialogue.

The senior leadership team of KOEL interacts continuously with various professional bodies like IDEMA, CII, FICCI, ARAI, ACMA, FIFO etc. This helps KOEL to understand the business environment and pre-empt changes in government regulations like emission norms and policy change which affects the industry. This helps in various aspects like managing risks and new product development.

Further, the company believes in providing right inputs to various regulatory bodies which would be beneficial for overall sector. With a view to this, the company has been an active member of various industry and trade bodies and participates in various industry events and stakeholder consultation/dialogue.

(GRI 415-1)

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GRI 305	Emissions	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	50	Partially disclosed

GRI 306	Effluents and Waste	306-1	Water discharge by quality and destination	44	
GRI 306	Effluents and Waste	306-2	Waste by type and disposal method	46	
GRI 306	Effluents and Waste	306-3	Significant spills	46	
GRI 306	Effluents and Waste	306-4	Transport of hazardous waste	46	
GRI 306	Effluents and Waste	306-5	Water bodies affected by water discharges and/or runoff	44	
GRI 307	Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	16	
GRI 308	Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	31	
GRI 308	Supplier Environmental Assessment	308-2	Negative environmental impacts in the supply chain and actions taken	NA	
GRI 401	Employment	401-1	New employee hires and employee turnover	56	
GRI 401	Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	58	
GRI 401	Employment	401-3	Parental leave	58	
GRI 402	Labor/Management Relations	402-1	Minimum notice periods regarding operational changes	64	
GRI 403	Occupational Health and Safety	403-1	Workers representation in formal joint management-worker health and safety committees	NA	
GRI 403	Occupational Health and Safety	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	NA	
GRI 403	Occupational Health and Safety	403-3	Workers with high incidence or high risk of diseases related to their occupation	NA	
GRI 403	Occupational Health and Safety	403-4	Health and safety topics covered in formal agreements with trade unions	NA	
GRI 404	Training and Education	404-1	Average hours of training per year per employee	56	Partially disclosed
GRI 404	Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	56	
GRI 404	Training and Education	404-3	Percentage of employees receiving regular performance and career development reviews	53	
GRI 405	Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	12	Partially disclosed
GRI 405	Diversity and Equal Opportunity	405-2	Ratio of basic salary and remuneration of women to men	53	
GRI 406	Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	59	
GRI 407	Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	31	



# ASSURANCE POLICY

## Assurance Policy

(GRI 102-56)

KOEL believes that independent assurance leads to quality and process improvements, and reassures readers and its management that the information published is accurate and material, and therefore contributes to building trust and credibility with key interest groups.

KOEL engage professional assurance providers who combine the strengths of non-financial assurance experience with technical competency in environmental and social standards. This report has been assured by Bureau Veritas, third party assurance provider.

KOEL believes that independent assurance leads to quality and process improvements. External assurance reassure the readers and the management that the information published on the public domain is accurate and therefore contributes to building trust and credibility with key interest groups and other stakeholders.

KOEL engaged professional assurance providers who combine the strengths of non-financial assurance experience with technical competency in environment and social standards. This report has been assured by Bureau Veritas, third party assurance provider.

## INDEPENDENT ASSURANCE STATEMENT



### Introduction and objectives of work

BUREAU VERITAS has been engaged by Kirloskar Oil Engines Limited (hereinafter abbreviated as "KOEL") to conduct an independent assurance of its **Sustainability Report** for the year 2017-18. This Assurance Statement applies to the related information included within the scope of work described below.

This information and its presentation in the **Sustainability Report 2017-18** are the sole responsibility of the management of KOEL. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

### Scope of work

The assurance process was conducted in line with Bureau Veritas internal procedures with 'Limited' level of Assurance. The scope of work included:

- Data and information included in Sustainability Report 2017-18 for the reporting period 1st April 2017 to 31st March 2018;
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyse and review the information reported;
- Evaluation of the Report against the principles of Accuracy, Balance, Clarity, Comparability, Reliability, Timeliness, Stakeholder Inclusiveness, Sustainability Context, Materiality and Completeness as defined in the GRI Sustainability Reporting Standard "In accordance - Core";



## Methodology

As part of its independent assurance, Bureau Veritas undertook the following activities:

1. Visited selected locations of KOEL and interviewed relevant personnel. The assurance process involved carrying out an audit by experienced auditors from Bureau Veritas. These auditors visited some of the locations. Relevant personnel of KOEL were interviewed including the plant in-charge and heads of various departments functions such as Production, Energy, Environment, Safety, Procurement, Human Relations, Marketing and Corporate Finance & Accounts.
2. KOEL had submitted performance data on reported GRI topics. The data pertaining to each location visited was audited by Bureau Veritas through the process above described.
3. The data was audited on a sampling basis. Data on various GRI sustainability topics was verified for the locations that were visited. Later, it was confirmed that the same verified data went into preparation of the final data within the Sustainability Report 2017-18.
4. Bureau Veritas reviewed stakeholder engagement activities that had been undertaken by KOEL and the Stakeholder Engagement process was reviewed. Evidence of the stakeholder engagement activities was reviewed to confirm how aspects material to KOEL stakeholders had been determined.

Our work was conducted against Bureau Veritas' internal procedures based on current best practice in independent assurance.

## Our findings

On the basis of our methodology and the activities described above, it is our opinion that:

- Nothing has come to our attention to indicate that the reviewed statements within the scope of our verification are inaccurate and the information included therein is not fairly stated;
- It is our opinion that KOEL has established appropriate systems for the collection, aggregation and analysis of quantitative data such as Environmental, Health & Safety and Human Resources, Labour & Community interventions as well as Product and Investor related data.

## Evaluation against Global Reporting Initiative (GRI) Sustainability Reporting Standard

Bureau Veritas undertook an evaluation of **KOEL Sustainability Report 2017-18** against the GRI Sustainability Reporting Standards. This included cross checking the GRI index table against all the reference documents to provide an opinion on the self-declared GRI reporting option.

Based on our work, it is our opinion that the **Sustainability Report 2017-18** has been prepared in accordance with the GRI Sustainability Reporting Standards including appropriate consideration of the reporting principles and necessary indicators to meet the requirements of **GRI Sustainability Reporting Standard Reporting Option "In accordance- Core"**.

## Limitations and Exclusions

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period stated hereinabove;
- Positional statements (expressions of opinion, belief, aim or future intention) by KOEL and statements of future commitment;
- Competitive claims such as "first in India", "first in the industry", "first of its kind" or such other claims appearing in the Sustainability Report 2017-18;
- Our assurance does not extend to the activities and operations of KOEL outside of the scope and geographical boundaries mentioned in the report as well as the operations undertaken by any other entity that may be associated with or have a business relationship with KOEL;
- Our assurance of the economic and financial performance data of KOEL is based only on the audited annual reports of KOEL and our conclusions rely entirely upon that audited report
- Our assurance is only against requirements as stipulated in GRI standard and not against requirements of any other sustainability standard, framework or guidelines

This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist within the Report.







Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Social and Environmental management with almost 180 years history in providing independent assurance services.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health & safety information, systems and processes an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

Bureau Veritas (India) Private Limited

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Sudarshan Godbole  
Lead Assurer

Naresh Badhwar  
Technical Reviewer

Date: 14-February-2019



# CONTRIBUTION TO UNSDG

## 7 AFFORDABLE AND CLEAN ENERGY



### Goal

Ensure access to affordable, reliable, sustainable and modern energy for all

### Business activities that contribute to SDGs

- The Integrated Management Systems including ISO 14001 based Environmental Management System, is the main framework to address protection and restoration of environment.
- During the year 2017-18, the total overall specific carbon emission was 3.15 kgs of CO<sub>2</sub>/BHP.
- KOEL has purchased Renewable energy through Open Access for its Kagal and Pune Locations.
- KOEL maintains a Register of Legal and other requirements for EHS, shared in the intranet 'mykoel.com'.
- KOEL has purchased Renewable energy through OA (Open Access) for its Kagal and Pune Locations for Improving its Carbon Offset during the year 2017-18.

### CSR / other programs that contribute to the goals

- 4<sup>th</sup> February 2018 was celebrated as Car Free Day in Dubai. Kirloskar DMCC also contributed to reduction in carbon footprints where all the employees avoided private cars commuted by public transport Bus and metro on 5<sup>th</sup> February 2018 for the maximum availability and participation of team members.

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## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



### Goal

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

### Business activities that contribute to SDGs

- Digitizing of service data with the "Electronic Field Service Report" (e-FSR) thereby enabling faster and better service response and real time updates to customers.
- Cost effective emission solution for Tier 4 Final/ BS IV CEV norms.
- The excellent RandD facility set up by KOEL is an important reason for it being able to sustain its business.

### CSR / other programs that contribute to the goals

- Tribal Village Development Programmes
- Financial assistance for education, Vocational training programmes for women for income generation, Banking Course to youth, etc.

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## 13 CLIMATE ACTION



### Goal

Take urgent action to combat climate change and its impact

### Business activities that contribute to SDGs

- KOEL monitors its Greenhouse Gas (GHG) emissions and related KPIs as part of its IMS monitoring system.
- Management review (by plant level Legal Committee) for the EHS compliances every quarter.
- Installation of 5.5 MW Solar PV plant in order to reduce dependency on MSEDCL grid, save on cost of energy and to move towards carbon neutral factory
- Installation of energy efficient equipment (Vaayu-Mig- 24) in place of conventional AC at Tool Room.

### CSR / other programs that contribute to the goals

- ENCON Initiatives, Hasat Khelat Paryavaran and Eco-club in schools.
- KOEL Celebrates National Energy Conservation Week to accelerate the ENCON awareness.
- 11<sup>th</sup> Kirloskar Vasundhara International Film Festival (KVIFF): This year festival theme was 'Save River, Save Life'. KVIFF is an innovative attempt to explore nature and analyse issues related to environment, wildlife, energy, air and water.

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Enriching Lives

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