



IndianOil

Sustainability Highlights 2017-18



About IndianOil

IndianOil is an integrated energy major and India's largest commercial enterprise. With a sales turnover of ₹ 5,06,428 Crore and net profit of ₹ 21,346 Crore, IndianOil has become India's most profitable PSU for second year in a row. The Corporation is the top ranked Indian company in Fortune 'Global 500' list.

Being an energy behemoth, IndianOil has presence across the hydrocarbon value chain and alternate energy sources. As a leader in the Oil & Gas business in India, it accounts for nearly half of India's petroleum products market share, 33% national refining capacity and 71% downstream sector pipelines throughput capacity.

Global Presence



Value Chain

Exploration & Production

To meet the growing energy demand in long term, we discover and develop oil & gas fields in India and overseas through joint ventures.

Refining

We refine and process crude oil to produce petroleum products such as petrol, diesel, LPG, lubricants and petrochemicals, etc.

Transportation

We transport crude and finished oil & gas products through various modes such as ship, road, rail and pipelines.

Marketing

We deliver finished products to our customers through our 47,800+ touch points.

The Energy of India

Operating Refineries	9	Pipelines Terminals	87
Depots & Terminals	125	LPG Bottling Plants	91
Lube Blending Plants	10	Petrochemical Producing Plants	3
Cryogenics Plant	1	R&D Centre	1
Kisan Seva Kendra (Rural Petrol/Diesel Stations)	7,529	SKO/LDO Dealers	3,897
Consumer Pumps	6,650	Wind Power Project	6
		LPG Distributors (including distributorships under Rajiv Gandhi Gramin LPG Vitaran Yojana)	10,213
		Retail Outlets (including Kisan Seva Kendra)	27,089
		Explosives Plant	12
		Aviation Fuelling Stations	107
		Solar Power Plant	3



Chairman's Message



*Dear Stakeholders,
Warm greetings on behalf of IndianOil.*

As IndianOil comes out with the Annual Sustainability Report for the year 2017-18, focussing on 'Enduring Trust. Enabling Growth.' I take this opportunity to share with you our journey on the path of sustainable value creation.

Sustainability Report 2017-18 delineates the Company's performance on the triple bottomline indices of People-Planet-Profit during the year, focussing on material issues and stakeholder concerns, while at the same time presenting our

strategy and goals for the future.

IndianOil's business strategy supports India's commitment towards Paris Agreement within the United Nations Framework Convention on Climate Change, or UNFCCC. For this, we are focussing on climate-friendly green fuels, renewable energy options, operational excellence, energy efficiency & conservation measures, mitigation of greenhouse gas emissions, waste disposal, etc. We are inspired and guided in our business by the United Nations' Sustainable Development Goals, and our commitment to long-term sustainable value creation is in line with the principles of the United Nations Global Compact.

IndianOil has been fuelling the growth of the nation and its people for nearly six decades with quality fuels in a safe, affordable, reliable and sustainable manner. We have surpassed our operational performance year after year through sustained efforts, while at the same time consolidating core activities and capitalising on new and emerging opportunities. Today, we have created substantial value by offering reliable and sustainable energy solutions to over a billion people.

2017-18 was yet another successful year for IndianOil in implementing action plans for sustainable operations through longterm strategies and viable low-carbon solutions.

IndianOil's portfolio of businesses continued to grow during the year, with a record sales turnover of ₹ 5,06,428 Crore and net profit of ₹ 21,346 Crore. We registered the highest ever petroleum product sales of 77.13 million metric tonnes (MMT) through over 47,800 customer touch-points. About 1.3 Crore new LPG connections were released during the year; with this, the clean and convenient *Indane* LPG cooking gas now reaches the doorsteps of over 12 crore households.

IndianOil refineries not only registered the highest ever combined throughput of 69 MMT per annum (MMTPA) in 2017-18, with a capacity utilisation of 99.7%, but together achieved the lowest ever Fuel & Loss and Specific Energy Consumption (MBN) at 8.75% and 72.61 respectively.



The Corporation's extensive pipelines network continued its exemplary contribution in ensuring uninterrupted supply of crude oil to refineries and finished products from refineries to bulk storage terminals in the most sustainable manner, leading to substantial savings in greenhouse gas emissions as compared to alternative transportation options. The network expanded to 13,400 km, with commissioning of 543 km of new pipeline systems in 2017-18, and registered the highest ever throughput of 85.68 MMTPA.

As part of its commitment to usher in cleaner and greener fuels, IndianOil started supplying Bharat Stage-IV (BS-IV) compliant transportation fuels throughout the country from 1st April, 2017. We are undertaking wide-scale upgradation of refinery technologies and processes to deliver the much superior BS-VI emission standard fuels across the country by April 2020. In fact, we have already made available BS-VI compliant petrol and diesel at all our filling stations in Delhi, meeting the advanced timeline of the Government. For upgradation of our refineries, technologies developed in-house are being used in a big way.

To propel the country's shift to cleaner fuels, IndianOil is importing natural gas and setting up countrywide infrastructure by way of LNG import terminals, pipelines and city gas distribution networks, on its own and through joint ventures. IndianOil firmly believes that long-term business growth is inseparably linked to responsible use of natural resources and mitigation of environmental footprints. Accordingly, we have voluntarily committed to reduce our specific carbon footprint by 18 per cent and specific water footprint by 20 per cent by the year 2020. As part of this, we have undertaken annual

carbon and water footprinting of our operations. Various sustainability measures, i.e., renewable energy generation, energy conservation projects, green buildings, conversion of fuel stations and office buildings to run on solar energy, energy audits and rainwater harvesting systems are lending a strong impetus in reducing our carbon and water footprint.

Energy conservation, led by innovative and progressive technology solutions, is one of our key sustainable development goals. Various energy conservation measures implemented across our refineries during the year have resulted in savings of 63,093 MT of Standard Refinery Fuel Tonne (SRFT). IndianOil's sustained investments in advanced technologies to improve the energy efficiency of its refineries has helped to achieve the lowest ever Energy Intensity Index (EII) of 98.5 during the year. Use of technology has also helped to reduce emissions significantly.

For IndianOil, managing water and waste across its operations is also of high priority. IndianOil reprocesses the maximum quantity of oil waste generated at its sites, and the remaining waste is disposed off using eco-friendly methods. During 2017-18, its refineries reused 89% of waste-water generated within their premises. Conservation measures helped reduce specific water consumption by 8.61 % in 2017-18 from 2012-13 level. In addition, over 560 rainwater harvesting systems set up across various units have a combined harvesting potential of 3 billion litres per annum. Further, 25 organic waste processing units are operating at various units.

The Corporation's Mathura and Gujarat refineries have begun preparations for using treated sewage water from Mathura and Vadodara cities for plant operations in place of fresh water.

IndianOil is also making steady progress in





renewable energy. During 2017-18, we increased our installed capacity of renewable energy to 202 MW (7.5% growth over 2016-17). We are currently implementing many small and large-scale renewable energy projects to reduce our environmental footprint.

We have plans to operate all our 27,000-plus fuel stations by installing Solar PV systems within the next three years. By the end of 2017-18, the cumulative number of fuel stations using solar energy for daily operations has gone up to 9,140, with a combined installed capacity of about 38 MW.

IndianOil's R&D Centre is involved in advanced research & development efforts in automotive/ industrial fuels, synthetic fuels, refinery process technologies & catalysts, safe disposal of oil, Hydrogen fuel cells & H-CNG blends, shale oil, nano-technology, petrochemicals & polymers, multi-feed (coal, petcoke & biomass, etc.) gasification/ liquefaction, and gas-to-liquid technologies.

We have an ambitious plan of setting up an IndianOil Centre for Alternative and Renewable Energy 'i-CARE' to carry out advanced research in bio-energy, solar, thermal, hydrogen and gasification technology. Work towards this is already in progress.

IndianOil is setting up second generation (2G) bio-ethanol plants of 100 kilolitres per day capacity from lignocellulosic biomass like paddy straw, wheat straw, bagasse etc. Ethanol produced thus will be blended with petrol as a green and renewable alternative fuel.

With the evolving nature of road transport from hydrocarbon-based fuels to hybrids and electricity-based, work is underway to create a market for bio-CNG produced from methanol/ bio-gas and also for exploring opportunities for fast-charging stations and battery replacement facilities within our fuel station network.

IndianOil is working on a new model to produce Bio-CNG from Methane and its application as a transportation fuel. For this, bio-gas produced from waste/bio-mass sources like farm residue, cattle dung, sugarcane press mud, municipal solid waste and sewage treatment plant waste would be utilised. This would also help utilise waste productively, minimise emissions and reduce pollution. MoUs have been signed with nine parties to retail Bio-CNG through the

Corporation's marketing network.

We are also undertaking waste-to-fuel projects under the aegis of Swachh Bharat Abhiyan of the Government of India. Three such plants, each of 5 tonnes per day capacity, have been set up in Varanasi. The electricity produced from biogas generated by these plants is being used to power street lights in the vicinity.

Further, IndianOil has also created a Start-up Fund to support innovations in fuel efficiency, renewables, waste-to energy, water efficiency, business process re-engineering, etc.

IndianOil has over 33,000 employees on its rolls, whose health and safety is an absolute priority for the Company. Over the past decade, we have steadily improved our safety performance with high standards in operations.

IndianOil spearheads many community welfare programmes across the country and has spent ₹ 331 crore during the year 2017-18 on Corporate Social Responsibility initiatives.

Besides health & sanitation and other welfare initiatives, as part of the Government's Pradhan Mantri Ujjwala Yojana (PMUY), we have released 1.67 Crore LPG connections to women from below poverty line (BPL) households who used to meet their cooking fuel requirements through firewood, cowdung cakes, etc.

Trust is pivotal to our business because it is the basis of every human relationship, every transaction and every market. As IndianOil celebrates 2018 as the 'Year of Trust', we are confident of enhancing our triple bottomline performance in the coming years with the support and trust of our stakeholders. Hence, I earnestly look forward to taking this dialogue forward through your views and suggestions.

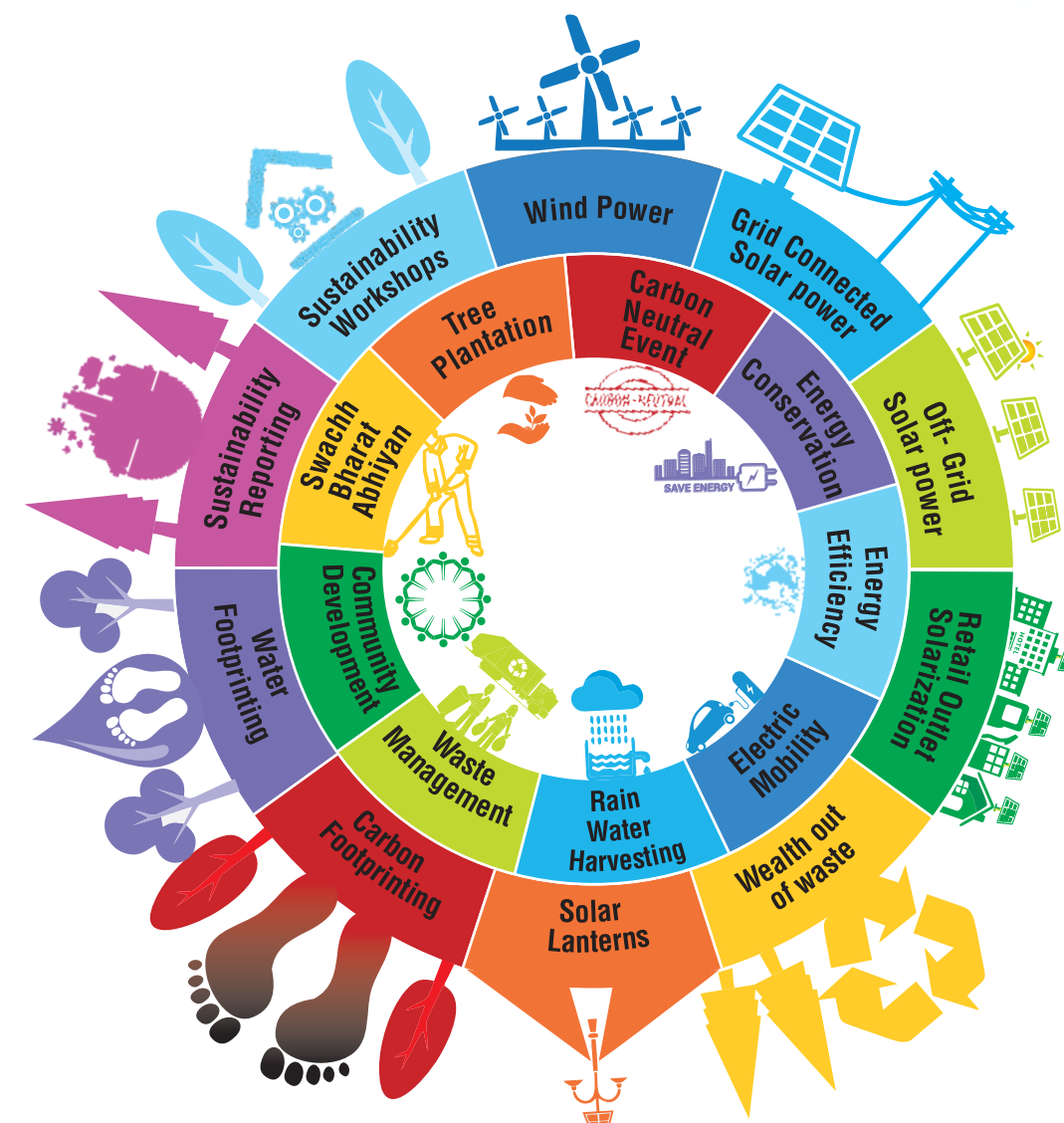
I request you to send your feedback to sustainability@indianoil.in

Sanjiv Singh

Chairman

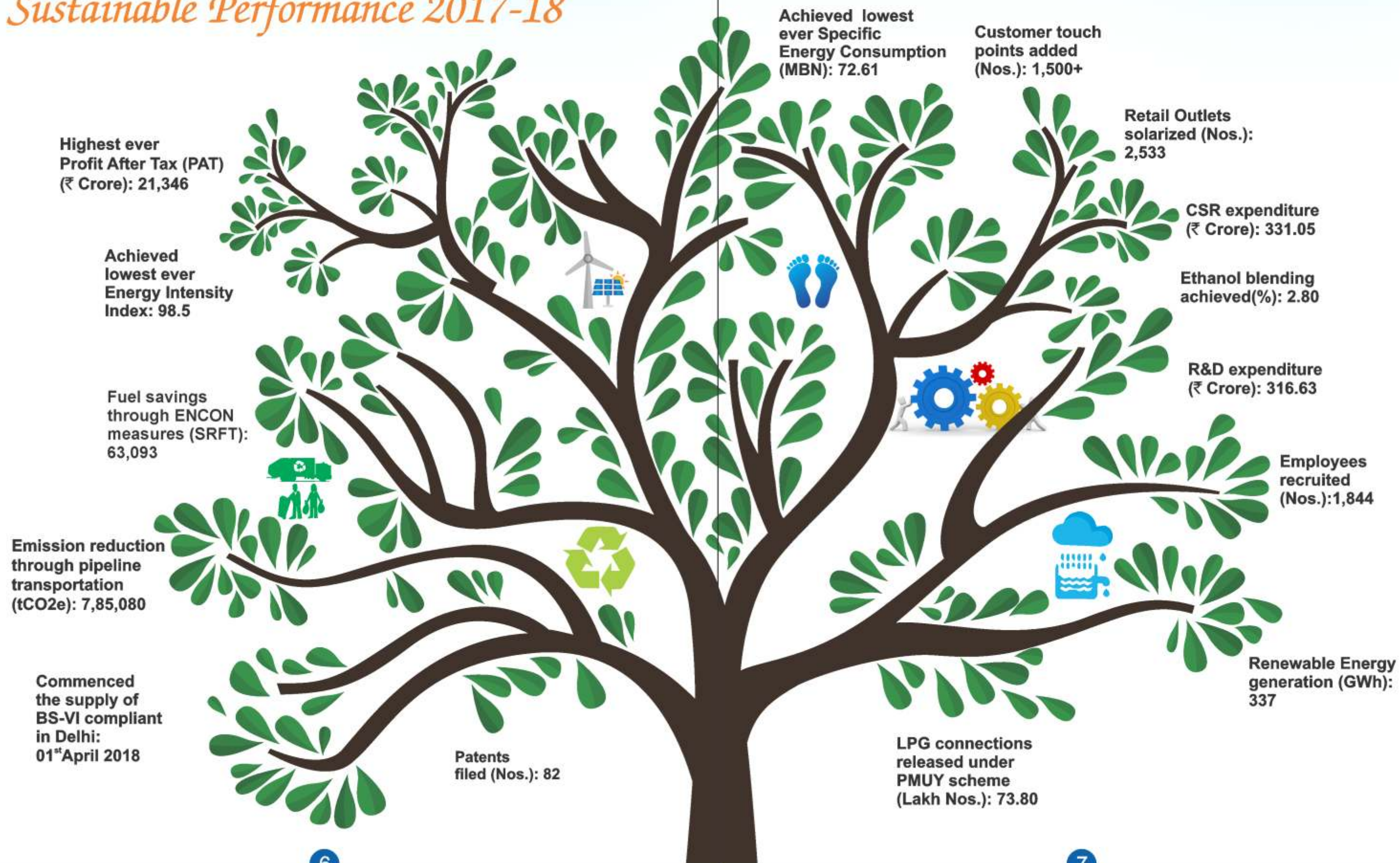


Sustainable Development Initiatives and Policies





Sustainable Performance 2017-18

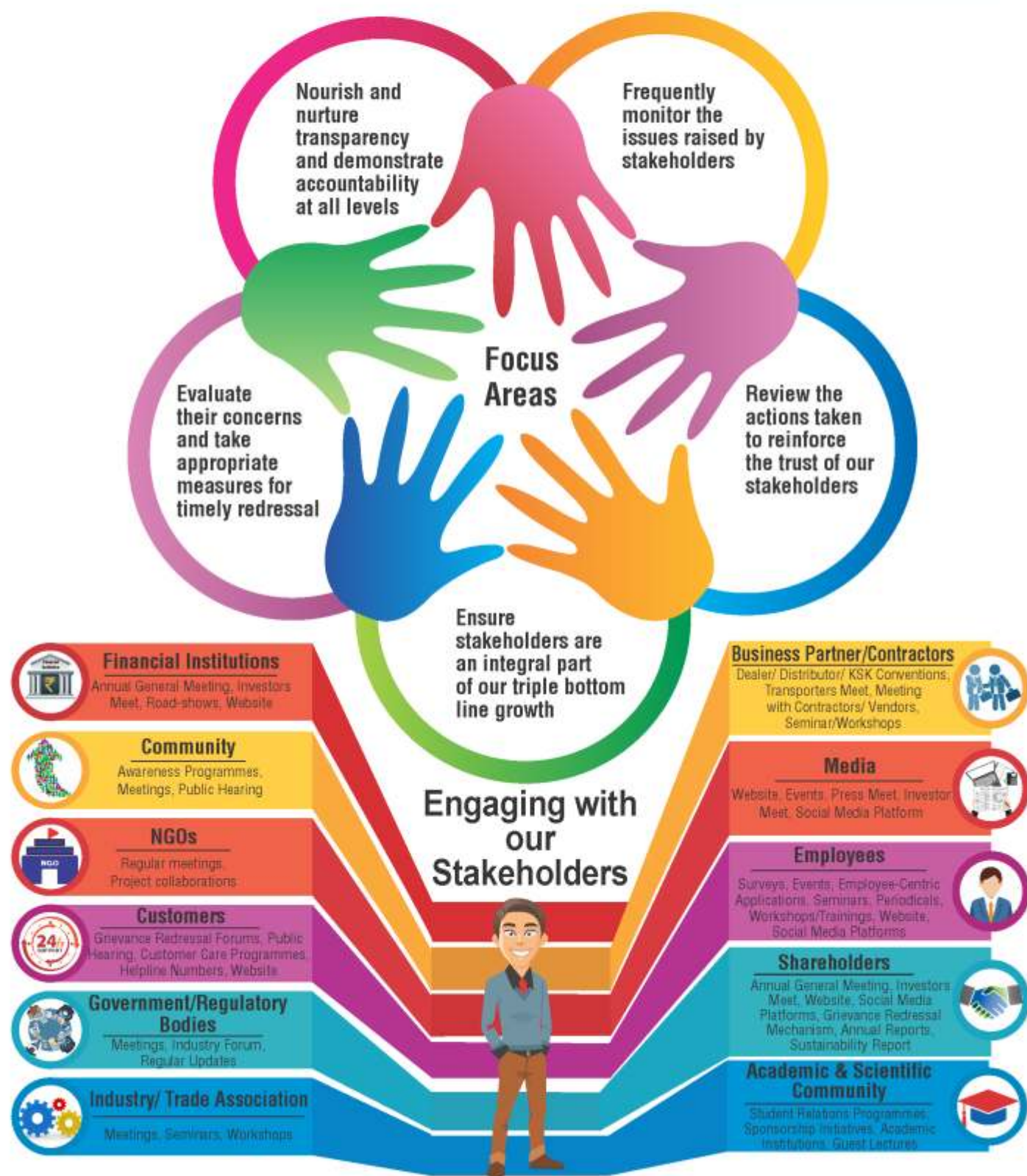




Enduring Trust. Enabling Growth.

Stakeholder Engagement

IndianOil profoundly values its stakeholders and strives to build trust and long-term relationships with them through structured engagement mechanism using various platforms.



Sustainability Highlights 2017-18

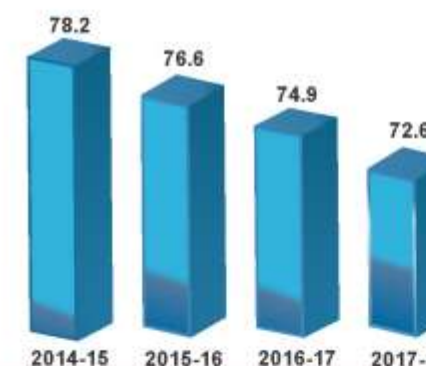
Year of Exceptional Performance

IndianOil achieved record product sales (including exports) of 88.76 MMT in 2017-18. The refineries have achieved the highest ever crude throughput of 69 MMT and pipelines registered 85.68 MMT of throughput during the year. The Mathura & Panipat Refineries have commenced the supply of BS-VI grade fuel, which helped the corporation to meet the government specified timeline for Delhi. The Energy Conservation (ENCON) measures implemented at the refineries resulted in an estimated fuel savings of 63,093 SRFT i.e. 226% higher than the previous year.

Operational Performance



Specific Energy Consumption* (MBN)



Energy Intensity Index* (EII)



ENCON Savings in Standard Refinery Fuel Tonnes* (SRFT)



Commenced the Supply of BS-VI Grade fuel in Delhi

*Data Pertains to Refineries divisions



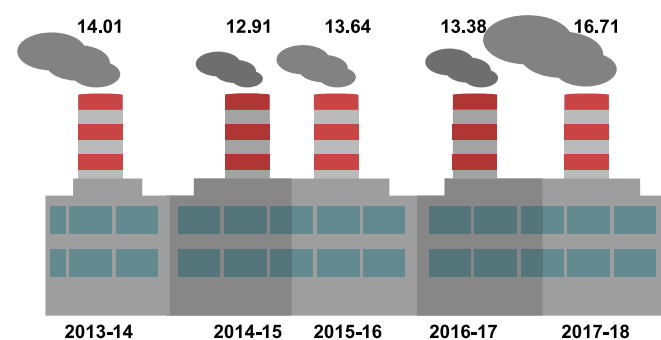
Environmental Performance

IndianOil undertakes various climate change mitigation and adaptation measures to reduce its overall environmental footprint, which in turn percolates into specific interventions at individual units and its retail network. The initiatives include energy efficiency, energy conservation, water conservation, renewable energy, retail outlet solarization, tree plantation, waste/biomass to fuel, LED lighting, rainwater harvesting, carbon neutral events etc.

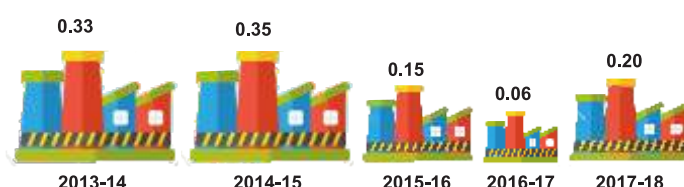
Carbon Management

IndianOil carries out carbon footprinting across its installations every year through which it identifies the various measures to reduce carbon footprint. The corporation has taken a voluntary target to reduce its specific carbon footprint by 18% by 2020 compared to 2012-13 level and achieved a reduction of 7.45% by the end of 2017-18. Further, power generation from renewable energy projects have helped reduce carbon emission by 277 TMT CO₂e in 2017-18.

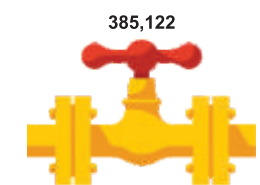
Year on year Scope 1 & Scope 2 emissions*
(in million metric tonnes of CO₂e)



Emission reduction due to ENCON projects* (in million tCO₂e)



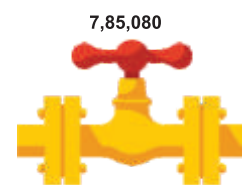
Emission avoided through pipeline transportation (in tCO₂e) in 2017-18



Total GHG Emissions due to pipeline transportation



Total projected emissions by rail transportation for same throughput

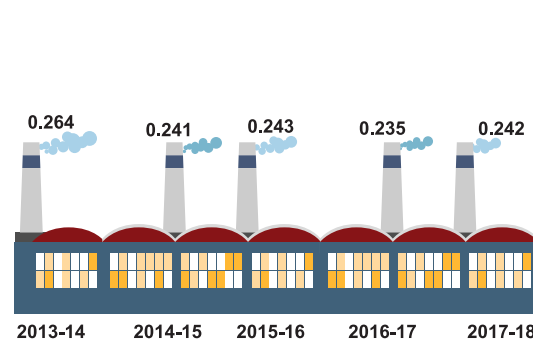


Emissions avoided through pipeline transportation

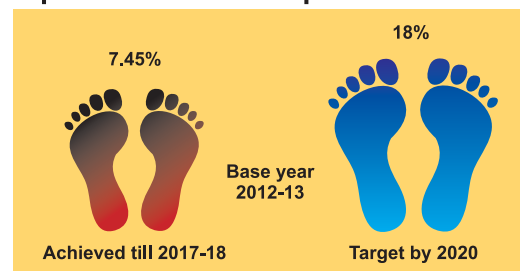
IndianOil has undertaken initiatives for organizing carbon neutral events which are made carbon neutral by sequestering emissions generated from these events by way of tree plantations. As on 31st March 2018, 107 events were made carbon neutral.

The Corporation intends to replace all the conventional lighting with LED lighting at our installations. As on 31st March 2018, 3.4 lakh LED lights were installed in our locations.

Year on year Specific emissions*
(in tCO₂e/MT of crude throughput)



Specific carbon footprint reduction*



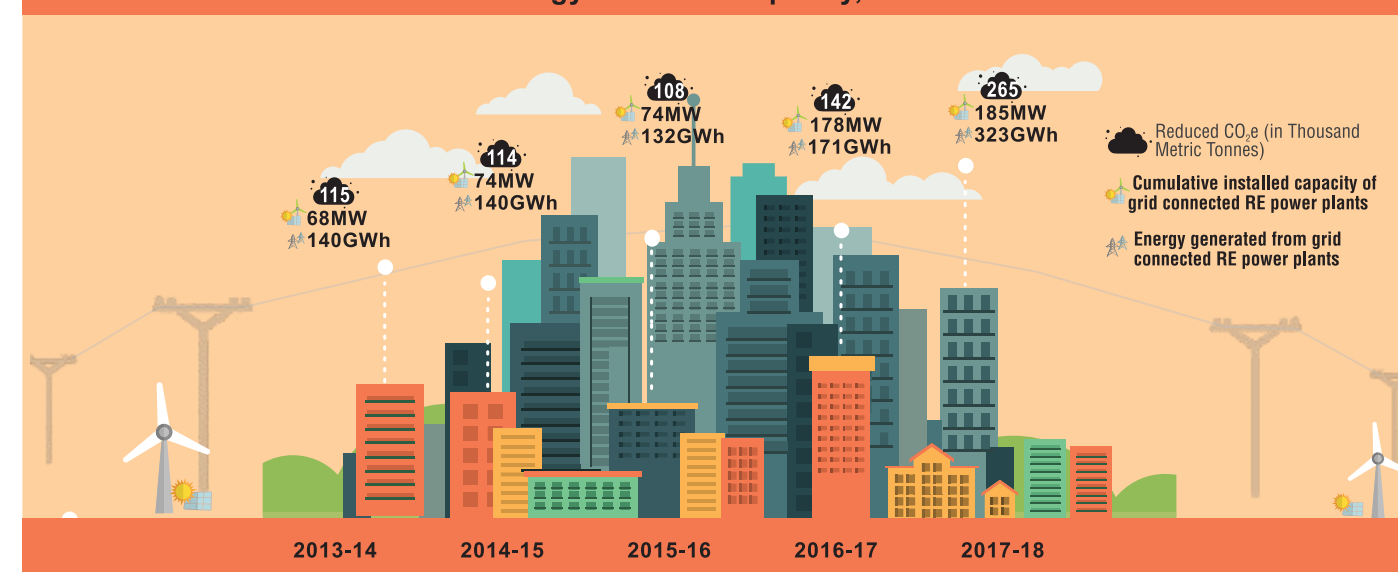
*Data Pertains to Refineries divisions



Alternative Energy

IndianOil has strong focus on country's transition towards clean energy and committed to increase its renewable energy capacity to 260 MW by 2020. The corporation has cumulatively commissioned 185 MW of grid-connected renewable power as on 31st March 2018, which includes 168 MW of wind power and 17.5 MW of solar power. The Corporation generated 323 GWh of renewable energy which corresponds to reduction of GHG emission by 265 TMTCO₂e (thousand metric tonnes carbon dioxide equivalent).

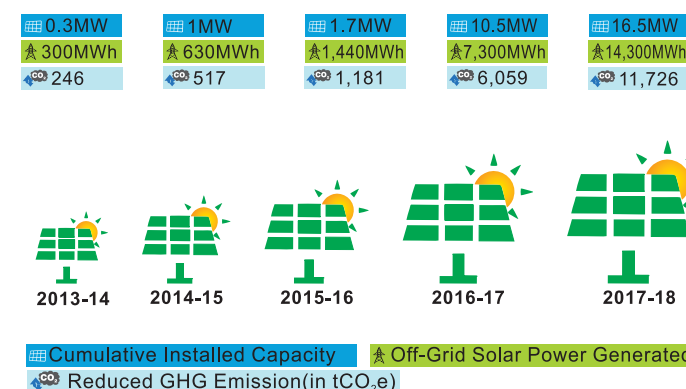
Grid connected Renewable energy- Installed capacity, Generation & Emission reduction



Off-grid Solar Projects

As on 31st March 2018, IndianOil has cumulatively installed 16.5 MW of off-grid solar power systems across its installations. The power generated from off-grid solar power is estimated to be 14 GWh during the year 2017-18, which corresponds to GHG emission reductions by 12 TMTCO₂e (thousand metric tonnes carbon dioxide equivalent).

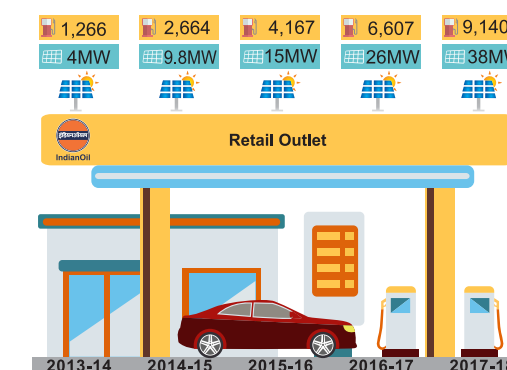
Off-Grid Solar Power



Retail Outlet Solarization

Retail Outlet (RO) solarization is a flagship program of the corporation aimed to create positive environmental impact by reducing the retail outlets' dependence on diesel generators. As on 31st March 2018, 9,140 retail outlets have been solarized with a cumulative off-grid solar power installed capacity of

Retail Outlet solarization



Cumulative No. of ROs Solarized

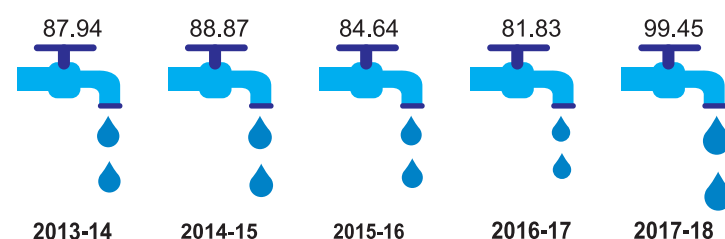
Cumulative Installed Capacity of solarPV systems



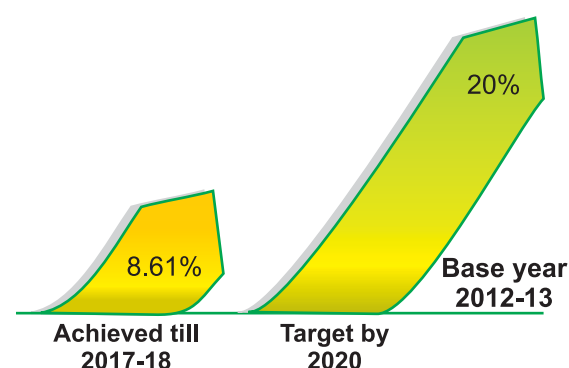
Water Management

IndianOil takes continuous efforts to improve its water efficiency in its operations and to reduce overall water footprint. The Corporation carries out water footprinting exercises every year across the locations to identify and implement water savings measures. It has made steady progress towards its voluntary target of reducing specific water consumption by 20% by 2020 compared to 2012-13 levels and achieved a reduction of 8.61% till 2017-18. IndianOil has installed 561 rainwater harvesting systems with a potential to harvest over 3 million kilolitres of water per annum.

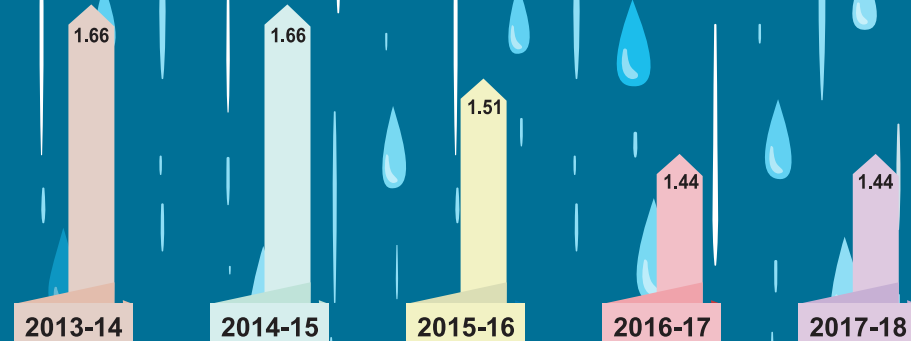
Total water consumption* (in million m³)



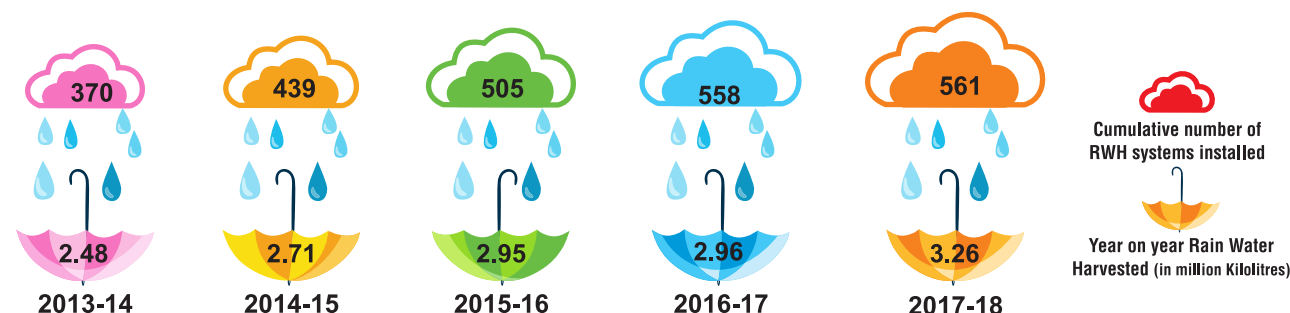
Specific water footprint reduction*



Specific water consumption* (m³/MT of crude processed)



Rain Water Harvesting (RWH) Systems



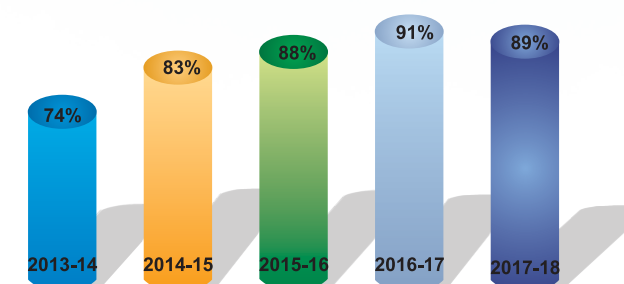
*Data Pertains to Refineries divisions



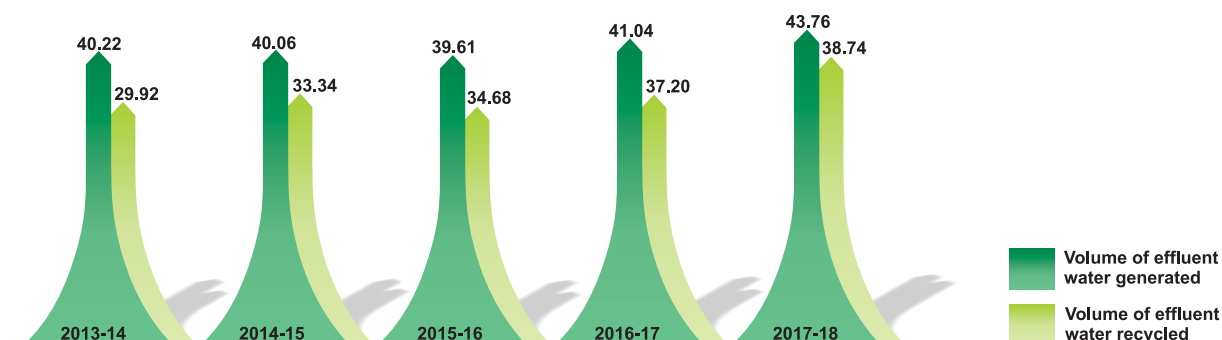
Waste Management

IndianOil strives to reduce the amount of waste of all sorts in its operation across its value chain and reuse/recycle the same wherever possible. Oil industry handles highly hazardous and toxic products and hence, safe disposal of waste generated is of utmost importance for the Corporation.

Percentage of effluent water recycled *



Effluent water generated vs recycled* (in million Kilolitres)



Commissioned two waste-to-energy plants of 5 tonnes per day capacity each, at Varanasi, under Swatch Bharat Abhiyan, taking the total number of waste-to-energy plants to three.

Exploring opportunities to market Bio-CNG produced from agriwaste, industrial waste, municipal solid waste through its retail outlets.



Setting-up three 2nd Generation Ethanol production plants at Panipat (Haryana), Gorakhpur (UP) and Dahej (Gujarat) of 100 KL per day capacity each.

Recycled around 130 tonnes of waste paper.



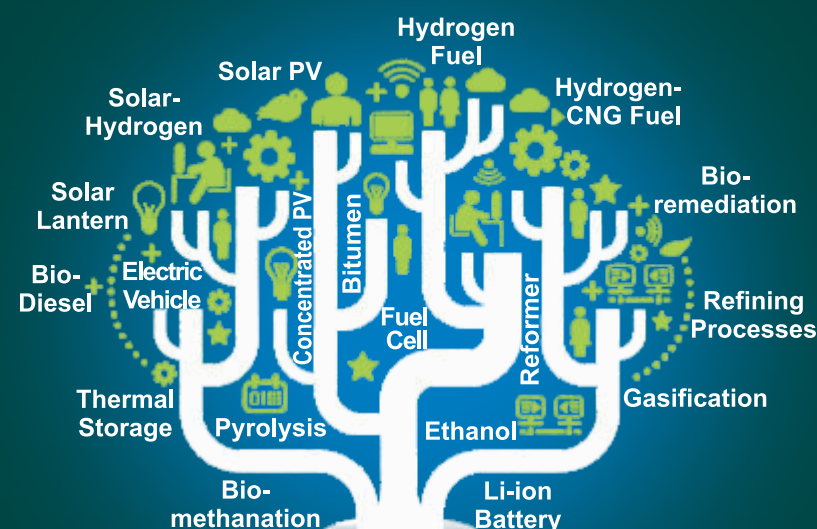
338 tonnes of organic waste was treated through biogas plants/OWCs installed at various units. Biogas generated used for cooking purpose.

*Data Pertains to Refineries divisions

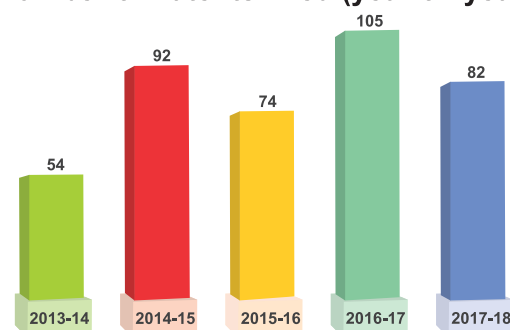


Innovation for Future

Research Landscape



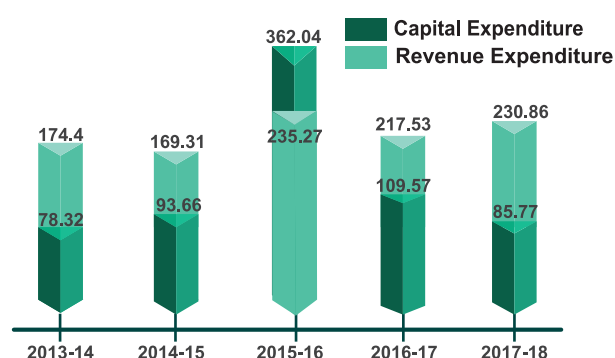
Number of Patents Filed (year on year)



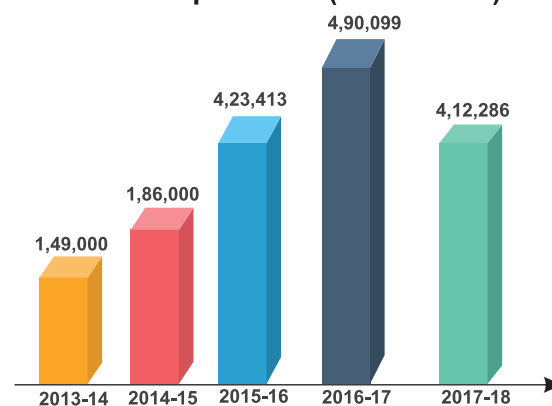
IndianOil made continuous efforts in its progress towards product excellence and improved its product offerings to meet customers' ever evolving expectations, at the same time complying with the prevailing regulations.

IndianOil's R&D centre, with a portfolio of 611 patents is focused on refinery processes, lubricant formulations, pipeline transportation and alternative fuels. The centre has also undertaken research in harnessing non-conventional energy sources.

R & D Expenditure (₹ Crore)

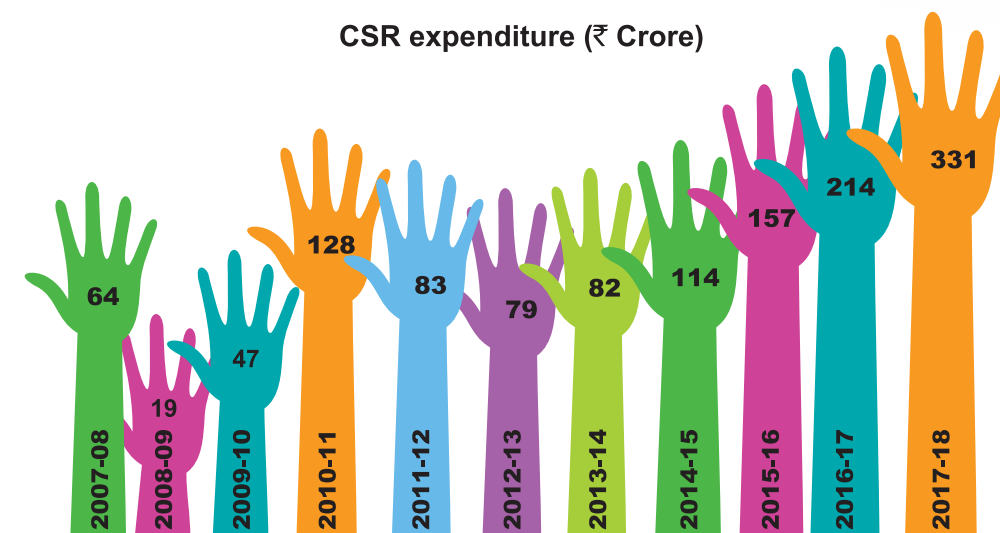


Ethanol procured (in kilolitres)



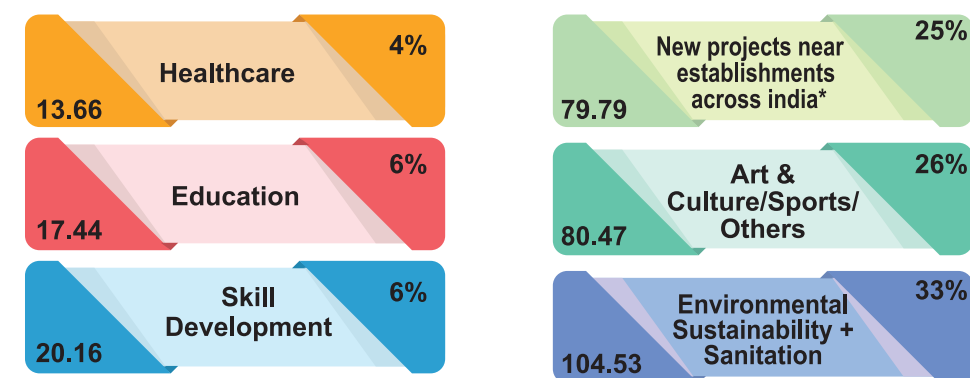
Building Stronger Community

CSR expenditure (₹ Crore)



As a responsible corporate citizen, IndianOil undertakes a number of community welfare projects to improve the socio-economic conditions of the people in the vicinity of area of its operations. For the year 2017-18, IndianOil spent ₹331.05 Crore on CSR activities, thereby achieving 100% budget utilization. With a greater emphasis on inclusive growth, IndianOil is focused to improve the quality of life of socially backward, marginalized groups and underprivileged section of society.

Activity wise CSR expenditure 2017-18 (in ₹ Crore & Percentage)



Focus Areas



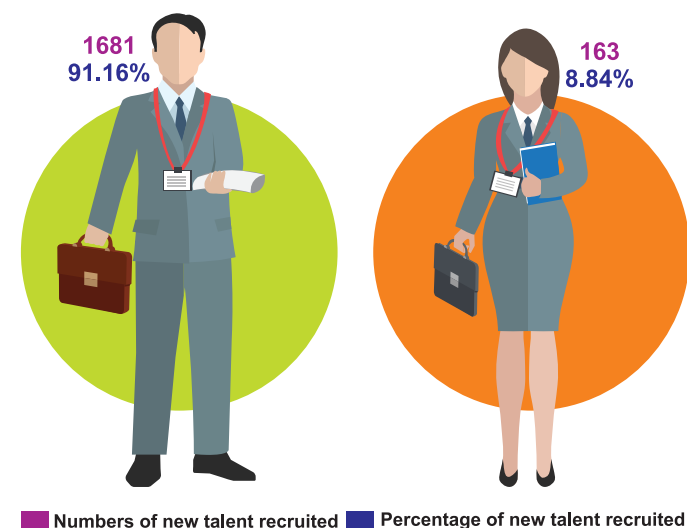


Beyond Profits: Employees at the core of our business

Employees are the backbone of our organization and the Corporation always strives to ensure that the quality of life of our employees improves and they remain motivated to achieve success for themselves as well as the organization. The Corporation trusts its employees in taking care of the organization's interests and recognize their contribution to its success. The corporation is also mindful of the employee feedback and formulates action plans for improvement in an effort to build the trust.

As on 31.03.2018, the IndianOil family stood strong with 33,157 employees, engaged in undertaking pan-India operations of the corporation.

New Talent Recruited (in 2017-18)



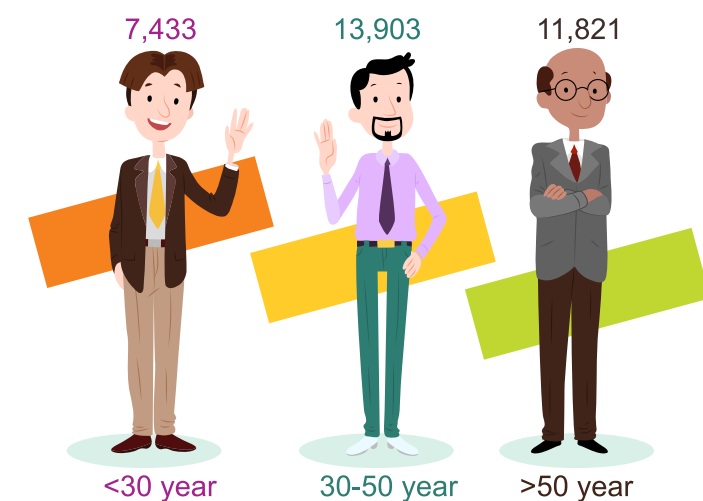
Benefits to Differently abled Employees

- Reservation in recruitment and promotions.
- Various allowances like conveyance allowance, medical equipment special training, special equipment aid.
- Provision of barrier free access.
- Preference in terms of posting to the extent possible.

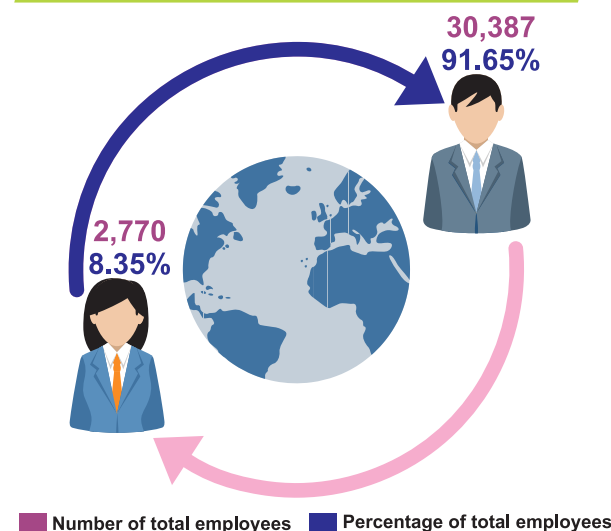
Social Security Benefits

- Contributory Provident Fund Gratuity.
- Group Linked Insurance Scheme EPS 1995.
- Compensation on death.
- Super Annuation Benefit Fund Scheme.
- Post-Retirement Medical Benefits.

Total Employees (by age group)



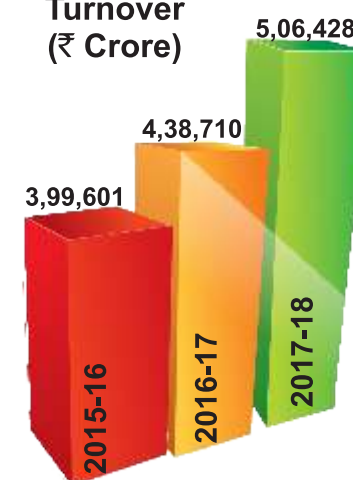
Total Employees (by Gender)



Financial Performance

IndianOil has achieved its highest ever sales turnover of ₹ 5,06,428 crore and net profit of ₹ 21,346 crore during 2017-18 making it India's most profitable Public Sector Enterprise. A contribution of ₹ 1,90,670 crore was made to the government exchequer.

Turnover (₹ Crore)



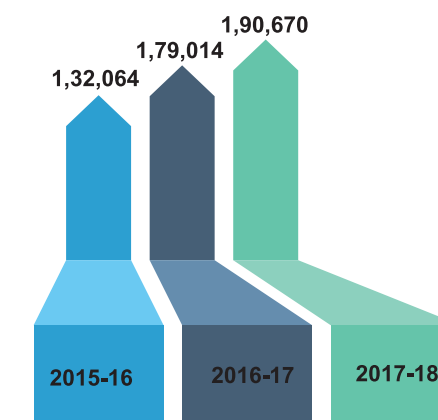
Profit After Tax (₹ Crore)



Networth (₹ Crore)



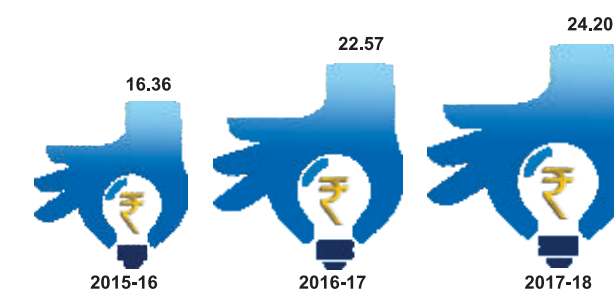
Contribution to Government (₹ Crore)



Dividend (₹ Crore)



Return of Average Capital Employed (%)



About the Highlights

IndianOil is publishing Annual Sustainability Report since 2005-06, disclosing its triple bottom line performance. The Sustainability Report 2017-18 is prepared in accordance with Global Reporting Initiative (GRI) standards conforming to Oil and Gas Sector Supplement (OGSS). The theme for our Sustainability Report 2017-18 is "Enduring Trust. Enabling Growth."

Sustainability Highlights is the abridged version of Sustainability Report. IndianOil is releasing Sustainability Highlights in hard copy since 2012-13 emphasizing its commitment to save paper. The comprehensive Sustainability Report is released in e-format only and the same can be accessed by visiting the webpage <https://iocl.com/AboutUs/sustainability.aspx>



Released on on 31st July, 2018

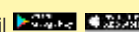


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