



IndianOil

## INDIANOIL'S CSR & SUSTAINABILITY INITIATIVES

Corporate Social Responsibility (CSR) has been the cornerstone of success right from inception of IndianOil. Under CSR, IndianOil has adopted 3 thrust areas under CSR, viz. 'Clean Drinking Water', 'Health & Medical Care' and 'Expansion of Education'. CSR projects are mostly undertaken in the vicinity of IndianOil's installations/ establishments for improving quality of life of the community, which include marginalized groups viz. SCs, STs, etc. IndianOil's annual CSR budget has gradually increased from 0.5% of previous year's Net Profit (1991) to 2% of previous year's Retained Profit (from 2009). IOC's CSR related objectives are aptly enshrined in its Vision/Mission statement: "...to help enrich the quality of life of the community and preserve ecological balance and heritage through a strong environment conscience...". At present, IndianOil has a policy of setting aside upto 2% of its Retained Profit of the previous year towards CSR activities. Since 1994-95, IndianOil has invested Rs.657 crore in various CSR activities. During 2012-13, DPE issued CSR & Sustainability guidelines, which defined CSR as 'Responsible Business' that includes both CSR & Environmentally Sustainability initiatives. This document enumerates the Environmentally Sustainability initiatives of IndianOil.

### INDIANOIL HAS 631 SOLAR OPERATED PETROL PUMPS; ESTIMATED CO2 EMISSION REDUCTION OF 2500 TONS EVERY YEAR:

Petrol pumps, normally known in the oil industry as Retail Outlets (ROs), are the bedrock of IndianOil's strong marketing network with about 17,000 urban and semi-urban outlets and about 5500 rural-format outlets (Kisan Seva Kendras or KSKs). One of the key problems faced by these outlets is erratic power supply, especially for ROs/KSKs in remote & rural areas, which many-a-times, damage Dispensing Units, thus increasing downtime. The only option for these outlets is dependence on Diesel Generators (DG), which are well known for inefficiency, pollution and high cost of power. Solar based alternative became possible with the rise of solar industry across the world & resulting lower costs. Today, such systems provide power at per unit cost of Rs. 8-10 against Rs.12-15+ for DG sets (depending on load). Although costlier than grid power as on date, the systems are extremely valuable in areas with more than 6 hours power outages. Longer life, very little maintenance (no moving parts!), lower costs & no-pollution are the key positives, thus making them very popular. As on 1st September 2013, IndianOil has solarised 631 ROs/KSKs, which are estimated to produce more than 3000 MWh of electricity every year, with estimated emission reduction of about 3800 tons of CO2. The ultimate objective is to remove dependence of ROs/KSKs on DG sets in the long run. Judging by the popularity of the solar systems, it has to be seen how soon the grid power gets relegated as a second fiddle to solar power!



IOC's Solarized KSK: M/s Kakad Brothers, Thanegaon, Maharashtra



IOC's Solarized RO: M/s RKBK, Dariba, Raibareilly, Uttar Pradesh

### INDIANOIL, THE FIRST PSU TO INSTALL 5 MW SOLAR POWER PLANT UNDER JNNSM; 9000 TONS CO2 EMISSION SAVED SO FAR:

Solar Energy is the fastest growing power-generation technology in the world & its rise has been like a fairy tale, in a world eager to harness its emission-free potential. IndianOil's solar venture started with marketing of solar lanterns (from petrol pumps) to rural households, which was a great rural initiative with intentions to replace kerosene. This laid the foundation for taking up larger grid-connected solar projects. In 2012, IndianOil went on to become the first PSU to install 5MW grid-connected solar PV system at Rawra, Rajasthan. Our project in Rajasthan was expected to serve as a learning experience for improving footprints in this arena. Till 31st August 2013, 11.36 GWh of solar electricity has been generated (project commissioned on 2nd February 2012), with estimated cumulative CO2 emission reduction of about 9000 tons.



IOC's 5-MW solar power plant at Rawra, Rajasthan

### INDIANOIL'S WIND POWER FORAY: 68 MW INSTALLED CAPACITY; 239,000 TONS CO2 EMISSION SAVED SO FAR:

Is it windy in India? Pretty much, considering India has several good locations along its coast. As a strong believer in a greener / cleaner future of energy in India, IndianOil has invested in 68 MW of wind power generation capacity in Gujarat & Andhra Pradesh. Cumulative power generation till 31st August 2013 is 308.7 GWh, corresponding to reduction of CO2 emission of 239,000 tons. The grid-connected wind power potential with present technology is however limited. Our off-shore wind prospects are yet to be harnessed. Once they become available, India's energy security burden may be significantly reduced. On a smaller scale, there are high prospects of decentralized (off-grid) wind-solar hybrids and we feel the Indian wind story is yet to be unfolded.



IOC's Wind Power Plants, Kutch, Gujarat



### SAVING PRECIOUS WATER

Water is precious to all. The functioning of industries depend on its steady availability. Recognizing the difficulty in accessing safe water across many places of India, IndianOil takes various measures across its installations to reduce its water footprint. During 2012-13, IOC's refineries reused 82% of the wastewater generated across its installations. IOC's 8 existing refineries and upcoming Paradip refinery are equipped with Effluent Treatment Plants (ETP). Liquid effluent is collected through underground network of Oily Water Sewer (OWS), Contaminated Rainy Water Sewer (CRWS) and Sanitary Sewer. The treatment comprises of physical, chemical, biological and tertiary treatment sections. Simultaneously, our refineries regularly conduct Water Pinch studies and come up with opportunities to reduce their water footprint. Additionally, more than 250 rainwater harvesting systems across IOC's installations are a testament to our unwavering effort in having minimum impact on existing ground and surface water sources of India.



### CARBON NEUTRAL MEETINGS & EVENTS / TREE PLANTATION

Meetings and events are integral part of any industry, which require employees / participants to travel long distances & stay at hotels/guest houses, resulting in burning of fuels/usage of electricity, leading to emissions. At IndianOil, since 2010, conscious efforts have been made to reduce such emissions by making events carbon neutral by planting trees. Till date, IndianOil has planted more than 13,000 trees in an effort to neutralise emissions from the major events. Moreover, IndianOil's refineries and other major establishments are landscaped with green belts and award winning ecological parks. These plantations are created in consultation with eminent botanists and with careful scientific planning. During 2012-13, 62,724 trees were planted across IndianOil, a third of which were done across the refinery green belts, presently accommodating nearly 22,00,000 trees. The ecological parks set up at refineries are akin mini-wildlife sanctuaries, attracting migratory birds and other wildlife.



IOC's Ecology Park (Bird Sanctuary), Barauni Refinery, Bihar



AOD Eco park