


Status of National Campaign on Energy Conservation 2006

Month: November 2006 (status as on February 28, 2007)


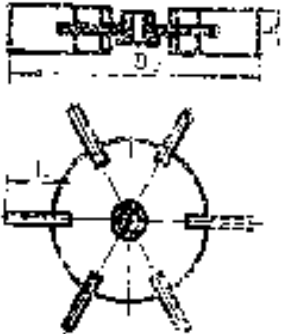
Industrial Sector (Private and PSUs):


Sl. No.	Activity as per the National Campaign on Energy Conservation	Status	Brief summary of the activity	Remarks / follow up
1	<p>Employees Training programme - organized by Indian Rayon – Hooghly, W.B.</p> <p>Seminar on proper selection of flowmeter-organized by Indian Farmers Fertilizers Cooperative Limited, Allahabad (U.P).</p>	Completed	<p>This activity was changed and instead the changed activity was carried out by Indian Farmers Fertilizers Cooperative Limited, Allahabad (U.P).</p> <p>M/s IFFCO conducted a seminar to make the participants aware of the need of selecting the optimum use flow meter and avoid unnecessary wastage of energy.</p>	
2	<p>Tips to save oil & gas - organized by Mother Dairy Unit-Patparganj, New Delhi.</p> <p>Steam conservation- organized by Perfetti Van Melle India Ltd, Chennai.</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Perfetti Van Melle India Ltd, Chennai.</p> <p>An energy conservation program focusing mainly on steam conservation & its optimum use was conducted on 22nd November for our technicians and shop floor employees. Delegates of Forbes Marshall were invited for the deliberations. The total nos. of participants were 25 for the 5 hour long program.</p>	
3	<p>Training program on Energy Conservation for employees of engineering discipline - organized by ITC Limited, Sardar Patel Road, Secunderabad.</p> <p>Meeting on Energy conservation targets-organised by Indian Acrylics Limited, Sangrur, Punjab.</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Indian Acrylics Limited, Sangrur, Punjab.</p> <p>A meeting of the energy cell was conducted on 11th November and following points and targets discussed:</p> <ul style="list-style-type: none"> • Various departments and their nominees to purchase energy efficient equipments & 	

			<p>fixtures for their unit and spread awareness on energy conservation measures.</p> <ul style="list-style-type: none"> • Welding Energy saver to be provided for newly purchased welding sets. • PIV used for staple dryers to be replaced with inverter drives. • Bag filters for the boilers to be replaced with Electrostatic precipitators • Replacement of 160W light fixtures with 40W tube light. • Use of Photovoltaic cell, Solar water heater etc. 	
4	Energy Conservation seminar for ISD (Information Service Dept.) - organized by Trident-Abhishek Inds. Ltd, Barnala, Punjab	Completed	<p>A seminar was conducted on energy conservation on 8th November attended by 10 employees of the Information services department. Following slogan was framed to be publicized within the factory campus</p> <p>“HAMARA LAKHSYA---PRODUCTION ME BADHOTARI---BIJLI MEIN KATOTI”</p>	
5	Monthly energy review with Banbury & pump house operator by Goodyear India Ltd. – organized by Ballabgarh, Faridabad, Haryana.	Completed	<p>An energy review meeting was conducted with the pump house operators where the following information was shared with the participants:</p> <ul style="list-style-type: none"> • A briefing on the present energy scenario was done to make the pump operators conscious towards saving energy. • Different Ait unit cost rate (200 psi,100 psi, 40 psi) was discussed • Auto operation of cooling towers for effective cooling and energy savings was explained to the operators. • Information was shared with the operators on energy saving achievable with resized factory water pump • Specific areas of improvements were discussed with the operators namely optimization of compressor combination and 	

			<p>operation of small factory water pump during shutdown.</p> <p>They were also encouraged to use their expertise and experience to effectively reduce energy consumption wherever possible.</p>	
6	<p>Energy Management & Audit program for Executives, Energy Awareness Program on Non-Executives, Training program on upkeep of Gas & utilities Pipe lines, Waste Management Program for Non-Executives, Review of Energy Performance by Designated Energy Manager/CMD - organized by Rashtriya Ispat Nigam Ltd. – Vishakhapatnam Steel Plant, Visakhapatnam, Andhra Pradesh.</p>	Completed	<p>The following promotional activities were organized for the executive and non-executive employees:</p> <p>Awareness program on Energy to Non-Executives:</p> <p>This 1-day training program was organized on 23rd November 2006 at T& DC through in-house faculty from Energy Management Department for 25 non-executives from major production departments.</p> <p>Energy Management and Audit Program</p> <p>This two days training program carried out on 28th & 29th November was meant exclusively for 27 Executives at T& D Center. It was conducted by in-house faculty from Energy Management Department. The program included topics on Principles of Energy Management and its importance.</p> <p>At the end of the program potential areas for improvement were identified for implementation by the executives in their respective areas of working.</p> <p>Energy awareness program on upkeep of gas & utilities pipe lines</p> <p>This 1-day program was organized on 21st November'06 through in-house faculty from Energy Management Department for 20 non-executives from major production shops.</p>	



			<p>Review on internal audit on Energy Consuming Equipments by DEM</p> <p>Energy audit was done for energy intensive equipments such as pumps, fans ,air conditioning systems, lighting system etc. by internal Energy Auditors who have been trained in energy audit principles & methodology by M/s NPC. During the audit, the operational data of equipments were collected in a systematic way over a period of time and the results obtained were compiled and compared with that of design parameters. The deviation in the performance of equipment if any and the root cause for the deviation were identified. Remedial measures for bringing back the normal performance were also identified and would be implemented in a cost effective manner in due course of time. DEM reviewed energy audits conducted for various equipments in the month of Nov'06 and appreciated the efforts put in by internal Energy auditors.</p>	
7	<p>Awareness program for contractor employees - organized by Numaligarh Refinery Ltd., Golaghat, Assam.</p> <p>Energy Conservation training to employees-organized by Thyssenkrupp Electrical Steel (India)Pvt. Ltd., Nashik , Maharashtra.</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Thyssenkrupp Electrical Steel (India) Pvt. Ltd., Nashik, Maharashtra.</p> <p>A 2 day energy conservation program was carried out at the training hall named 'Gurukul' for the employees. Training was imparted on the energy conservation activities carried out at the plant. The total number of participants were 118 & and apart from english, the training was also given in local languages of hindi & marathi.</p>	
8	To provide recent developments in the field of motors on energy saving -conduct work shop on energy conservation in LT Motors - organized by Hindalco Inds. Ltd., Sambalpur, Orissa.	Completed	Electrical motors consume nearly 70-80% of electrical energy in any industry. Based on the above fact, a workshop was conducted on 28 th November 2006 to familiarize operatives and supervisor of electrical department about the recent developments in the field of LT motors and	

			<p>energy conservation aspects in motors. The program was organized in the R&D conference hall and was attended by 35 participants from Electrical Maintenance Department, Rectifier, and Continuous caster and cast house-II.</p> <p>In the initial session a lecture was delivered on the different technical aspects of electrical motors. The EBD (Efficiency based design) and PFBD (Power Factor Based Design) was presented to the participants.</p>	
9	Debate on Energy Conservation among employees - organized by IPCL, Nagpur, Maharashtra.	Completed	<p>This activity was changed and instead a CDM meeting was conducted.</p> <p>A two day all sites Energy Conservation & CDM Meet-2006 organized by RIL, CDM Cell was held at Mumbai. A total number of 75 delegates from all the RIL sites including Jamnagar refinery participated. The meeting was addressed by the RIL Group President, dignitaries from BEE & officials from CDM India cell.</p>	
10	Waste heat recovery from incinerator to generate low-pressure steam implemented by Gharda Chemicals Ltd. Dombivli, Thane, Maharashtra.	Completed	<p>This activity has been changed and instead the activity of installation of high efficiency impellers was carried out.</p> <p>Many batch chemical reactions are normally governed by different types of agitators in batch reactors. Nowadays, high efficiency impellers are more versatile than conventional agitators like gate/paddle and disk-turbine. Chemineer/Rathi A-310 type axial flow impellers are normally recommended. It has been observed that axial flow impellers are more efficient than radial flow impellers with lower Power number which is directly related to power consumption</p> <p>$P(kw) = NP * D^5 * N^3 * Sp. Gravity \text{ of liq.}$</p>	 <p><u>Disk turbine agitator in IP-condensation vessel before modification</u></p>

			<p>Power no of disk turbine with baffles is 5.0 where as in case of Rathi-A-310 type axial flow impeller NP=0.6 which is 8 times less than the conventional power consumption.</p> <p>Installation four nos. axial flow Impellers in place of conventional Disk Turbine agitators was carried out.</p> <p>TECHNICAL & FINANCIAL ANALYSIS</p> <p>Project cost : Rs. 200000 /-</p> <p>Power Saved : 200000 kwh/yr.</p> <p>Annual Saving : Rs. 900000 /-</p> <p>Pay Back period : 3 months</p>	 <p><u>RATHI A-310 Type (new axial flow type impeller)</u></p>
11	<p>Energy week celebration : Information stand for 1-2 days in a strategic location - organized by National Fertilizers Ltd. Vijaipur, Guna, M.P.</p> <p>Awareness Program for use unwanted lighting point to residence - organized by Rajasthan Spinning & Weaving Limited, Udaipur (Rajasthan)</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Rajasthan Spinning & Weaving Limited, Udaipur (Rajasthan)</p> <p>A awareness program was conducted for all staff members of the campus and the following tips on energy conservation was shared with them.</p> <p>(a) T.V. and computers never to be kept in the standby mode.</p> <p>(b) Use the CFL lamp instead of ordinary bulbs & fluorescent tube light.</p> <p>(c) Frequent use of daylight.</p>	


12	<p>Valediction of the Annual programmes & Recognition of the best performances for the activities taken up during the year - organized by National Fertilizers Ltd. Vijaipur, Guna, M.P.</p> <p>Load factor study of individual machines - organized by Rajasthan Spinning & Weaving Limited, Udaipur (Rajasthan)</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Rajasthan Spinning & Weaving Limited, Udaipur (Rajasthan)</p> <p>Load factor study was undertaken for 91 machines. Corrective action was done for machines consuming power in excess of design specifications.</p>	
13	<p>Training Programme for Energy Conservation for small scale industry& awareness programme among employees organized by – IPCL Gandhar.</p> <p>Training program for non-technical officers-organised by Hindustan Paper Corporation limited, Nagaon.</p>	Completed	<p>This activity has been changed and instead the changed activity was carried out by Hindustan Paper Corporation limited, Nagaon.</p> <p>A training program was organized on 3rd of November for non-technical officers. The focus area of the session was details of energy consumption in terms of percentage of maintenance cost and specific electrical energy consumption. Steps to mitigate the electrical consumption were also discussed. 14 nos. of officers participated and benefited from the session.</p>	
14	<p>Energy Awareness Program in Steel Melting Shop-2 organized by – Bhilai Steel Plant (Bhilai).</p> <p>Energy Cell meeting & discussion of last month's activity - organized by Rajasthan Spinning & Weaving Limited, Udaipur (Rajasthan)</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Rajasthan Spinning & Weaving Limited, Udaipur (Rajasthan)</p> <p>Energy cell meeting was held on 20.11.2006 & new areas of saving energy were identified .In the month of November, the energy saving achieved was approximately 971 units per day.</p>	

Domestic Sector



Sl. No.	Activity as per the National Campaign on Energy Conservation	Status	Brief summary on the activity	Remarks / follow up
15	<p>Awareness program on Energy Conservation to Thailavaram village people-organized by Perfetti Van Melle India Pvt. Ltd., Tamil Nadu.</p> <p>Energy conservation program for housewives - organized by Rashtriya Ispat Nigam Ltd. – Vishakhapatnan Steel Plant, Visakhapatnam, Andhra Pradesh.</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Rashtriya Ispat Nigam Ltd. – Vishakhapatnan Steel Plant, Visakhapatnam, Andhra Pradesh.</p> <p>Two programs namely “ENERGY at HOME” were organized by VSP & PCRA on 27th November’06. The program includes inaugural address by General Manger (utilities), keynote address by Smt.Chinnama Sagara Rao president of Visakha Steel Mahila Samiti followed by a close interactive session and Quiz. GM (Utilities) in his inaugural address expressed happiness for the efforts put in by VSP and emphasized the need for bringing more awareness on energy in the society. VSP is the lowest energy consumer among the Indian Integrated Steel Plants and won “National Energy Conservation Awards” from Ministry of Power, Govt. of India consecutively since 2000. The president of Visakha Steel Mahila Samiti applauded the efforts of VSP for involving school children & house wives and reminded that energy conservation is not the job of a few people but a job to be done by every one. In view of increasing demand for energy and fast depletion of energy reserves, energy conservation must be the way of our life. Regional Coordinator, PCRA gave several tips to about 200 house wives in an interactive session on how to save LPG which will go long way in conserving LPG. The sessions were quite interactive and thought provoking and appreciated by one and all. A quiz on energy was also conducted for participants to increase competitive spirit. Winners of quiz competition were suitably rewarded.</p>	 


16	<p>Painting competition on 'Energy Conservation' for house wives in refinery township – organized by Reliance Industries Ltd. , Refinery Div., Jamnagar.</p> <p>Energy talk for school children- organized by GAIL, Vijaipur.</p>	Completed	<p>This activity has been changed and instead the changed activity was organized by GAIL, Vijaipur.</p> <p>A session on energy conservation was organized for school children at KV school, GAIL complex. Children from standard four to standard ten participated in the program. They were enlightened with the use of non-conventional and renewable sources of energy, initiatives they could take to avert an energy crisis and how they could contribute in building an energy efficient nation.</p>	
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Commercial Sector

Sl. No.	Activity as per the National Campaign on Energy Conservation	Status	Brief summary on the activity	Remarks / follow up
17	Release of advertisement on energy conservation in print media – organized by Bureau of Energy Efficiency	Completed	The message of energy saving was advertised in many newspapers across the country with the heading of " Switch over to Power Savers". It carried the message of Standards and Labeling program being launched in the country for the first time and also the five star rating system for energy efficient products.	 <p>The clipping shows a newspaper article titled "Switch to five-star power savers" under the sub-headline "TOP BILLING". It features a photograph of a compact fluorescent light bulb (CFL) and text describing the launch of the Standards and Labeling program for energy efficient products. The article mentions that this is the first time such a program has been launched in the country and highlights the five-star rating system for energy efficient products.</p>

Educational Institutions

Sl. No.	Activity as per the National Campaign on Energy Conservation	Status	Brief summary on the activity	Remarks / follow up
18	<p>Slogan competition on Energy Conservation - organized by Ballarpur Inds. Ltd- Ballarpur unit, Chandrapur.</p> <p>Seminar on energy conservation – organized by Reliance industries Ltd., Navi Mumbai, Maharashtra.</p>	Completed	<p>This activity has been changed and instead the changed activity was organised by Reliance industries Ltd., Navi Mumbai, Maharashtra.</p> <p>A seminar was organized at Amity school of engineering in Noida, Delhi. The students were motivated to adopt principles of energy conservation and a lecture session was held encompassing the following topics:</p> <ul style="list-style-type: none"> • Basics of energy conservation • Energy Conservation Act 2001. • Climate change-Global warming • Energy conservation techniques-Fuel, steam, power. • Energy conservation techniques- Utilities like cooling water, DM water, compressed air system and refrigeration. 	
19	<p>Essay competition for school children organized by -Ultratech Cement Ltd, Aditya Birla Group.</p> <p>Energy conservation program for students of Jyoti Niwas High school, Jagiroad- organised by Hindustan Paper Corporation Ltd., Nagaon.</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Hindustan Paper Corporation Ltd., Nagaon.</p> <p>A energy conservation session was organized for students of standard seven, eight and nine of Jyoti Niwas High school on 16th of November. The session was attended by 86 students and they were enlightened about concepts of energy conservation .Lectures were delivered on the following topics:</p> <ul style="list-style-type: none"> • Impact of energy conservation on environment • Greenhouse effect • Tips for reduction of power • Water and LPG consumption • Use of CFL. 	 

20	<p>Wind mill model preparation contest for school children, lectures, team games etc - organized by National Fertilizers Ltd. Vijaipur, Guna, M.P.</p> <p>Energy conservation program for students of Indus Academy, Jagiroad- organised by Hindustan Paper Corporation Ltd., Nagaon.</p>	Completed	<p>This activity has been changed and instead the changed activity was performed by Hindustan Paper Corporation Ltd., Nagaon.</p> <p>A group of 28 children of standard five and six along with teachers attended an interactive meeting on 18th November at training centre, NPM followed by a plant visit. Energy efficient equipment and devices installed in the plant were shown to the children and they were also explained about their working. The children were motivated to adopt energy saving steps in their day to day life.</p>	
21	Conduct of painting competition on energy conservation at State/ UT level –organized by Bureau of Energy Efficiency.	Completed	<p>An advertisement on Painting Competition on Energy Conservation for children of fourth and fifth standard was published in several news papers in Delhi on 14th Nov 2006. Children shape the future of the country and hence this is an initiative to inculcate in them the importance and the need to save energy.</p>	