

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID to be filled by BEE	Title of the measure	Sector: Chemical			
Year to be filled by BEE	Energy saving through revamping of Insulation at phosgene plant	Technology			
Description of the energy conservation measure:					
<p>In phosgene plant, -25 Deg.C Brine used for BCF production and phosgene storage. Condition of insulation audited and found to be very poor. Replaced with new insulation, which resulted in reduction in heat loss of 12 TR.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 4.3 Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 6.5 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	190000				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr.K M Desai				Signature	
				Date	

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Power saving by Cooling Tower restructuring at 2-4 D plant to take additional load of vent and ML cooling without additional cooling tower.		Technology			
Description of the energy conservation measure: At agro 2-4 D plant, cooling system restructuring carried out so as to take additional load of vent condensers and ML cooling condensers without any additional cooling tower. (This was possible by balancing loads on cooling towers)						
Picture/ sketch/ drawing before modification <small>(if available)</small>			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: Nil			Year of implementation: 2007			
First year energy cost savings, Rs.: 5.46 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	155000					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr.K M Desai				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical		
Year	Recovery of condensate from Dryer no 2 of 2-4 D plant		Technology		
Description of the energy conservation measure: At agro 2-4 D plant, Dryer No: 2, earlier condensate was drained. System for collection and using this condensate in the same plant was installed which resulted about saving of 4158 KL of hot water. Heat value of this hot water is equivalent to 385 MT of steam/year					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 0.1 Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 2.5 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption		115			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		2100			
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. K M Desai				Signature	
				Date	

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Interconnecting compressed air system of DCP and 2-4 D plant to stop one compressor operation.		Technology			
Earlier DCP and 2-4 D plant air compressors were run individually. Interconnection of both plant pipes was done and one compressor at distillation was stopped. Saving of Power about 2,20,000 KWH per year was achieved.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 0.2 Lakhs			Year of implementation:2007			
First year energy cost savings, Rs.: 2.2 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	2,20,000					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai				Signature		
				Date		



Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure	Sector: Chemical			
Year	Reduce power consumption of cooling tower pumps by reducing number pumps in operation	Technology			
<p>Description of the energy conservation measure: At Caustic plant Cooling Tower, two nos. of pumps of 80 HP were installed initially for cell house cooling water requirement. Although one pump is sufficient for average requirement, it was observed that quite a time for maintaining pressure of 2 kg/cm², second pump was used. So total power consumption was much increased compared to increase in flow. So one spare pump of 120 HP installed and now only one pump of 120 HP sufficient to fulfill the requirement through out the year. Thus reducing overall power consumption.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.:0. 9 Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 1.39 Lakhs					
First year other savings, Rs.:0. 5 Lakhs (Improvement of condensers performance)					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	34000				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.1				
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination Signature Date	
Contact person who could be contacted for more information:Mr.K M Desai					

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Power saving by On/Off valves for condensers		Technology			
<p>Description of the energy conservation measure:</p> <p>At west site shed D Utility, all condensers inlet/outlet valves were manually operated. It was monitored that even if refrigeration compressors of CHW/CHBR/Ice plant are not running, these valves kept open throughout the year.</p> <p>Pneumatic ON/OFF valves installed at outlet of condensers, which closes when compressor is stopped (With delay of 3 min.) and opens before compressor starts.</p> <p>This has resulted in</p> <p>(1) Reduction in CW pump power consumption,</p> <p>(2) Improvement of condensers efficiency because C/W supply pressure to operating condensers is increased.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 7.94 Lakhs			Year of implementation: 2007			
First year energy cost savings, Rs.: 10.7 Lakhs						
First year other savings, Rs.: 0.7 Lakhs (Improvement of condensers performance)						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	306000					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. K M Desai				Signature		
				Date		


Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical		
Year	Power saving by reducing pressure drop in piping for cooling water.		Technology		
<p>At west site cooling water piping between VAT - I & VAT - II services have line size of 200 NB and 100 Mtr long. Sometimes insufficient pressure causes problems in process. One 100 NB pipe in parallel to this line was installed which resulted in reduction in pressure drop of about 0.6 kg/cm² and it has resulted in 8.2 KW power saving and pressure problem was also sorted out.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 1.5Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 2.41 Lakhs					
First year other savings, Rs.:0. 7 Lakhs (Improvement of condensers performance)					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	69000				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information:Mr.K M Desai				Signature	
				Date	


Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Heat recovery by preheating boiler feed DM water across acid circuit of 60 TPD SAP.		Technology			
<p>Earlier Sulfuric Acid (98%) and Oleum (25%) cooling was carried out with cooling water through spiro-coolers. Heat released was absorbed by cooling water and wasted. New semi-welded PHE of Has alloy C construction Installed in the circuit to cool the acid and bypassing the spiro-coolers. This heat is now utilized in another PHE in SS-316 construction for preheating boiler feed DM water from 30 Deg.C to 50 Deg.C.The equivalent amount of steam in Deaerator is saved. Automatic switch over to previous system is installed in case of abnormal PH or conductivity/any other problem.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 57.2 Lakhs			Year of implementation:2007			
First year energy cost savings, Rs.: 52.7 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption			2200			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...			2400			
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Utilizing surplus steam for air preheating in spray dryer		Technology			
<p>In shed D of colors division, Earlier kerosene fired burner was used for air heating in D04/50 and D04/45 spray dryers. We have installed additional preheating coil before air is heated in burner as we already have excess MP and LP steam available from power plant. Thus it was possible to reduce operating cost of the burner system.</p> <p>An independent fan along with filter was installed. Air is feed through heating coil to burner chamber and thus saving of equivalent amount of kerosene by utilizing steam heating.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 12 Lakhs			Year of implementation: 2007			
First year energy cost savings, Rs.: 72 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption					296 KL (Kerosene)	
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...						
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr. K M Desai						
				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Reduce steam consumption/ chiller load by change in process		Technology			
<p>At colors division, in one product Int. 509/T wet cack was dissolved in toluene & same was heated to dehydrate out water. Water along with toluene was condensed first with cooling water in main condenser and then with chilled water in subcooler. This sub cooled mixture passes thro' separator for separating water/toluene and toluene is returned back to process.</p> <p>This system was modified to bypass sub cooler and send cooled mixture directly to separator so as to reduce chilling requirement and to reduce steam consumption during dehydration due to increased temp. of recycled toluene.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: Nil			Year of implementation: 2007			
First year energy cost savings, Rs.: 0.4 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	7900	5.8				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5	2100				
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Power saving by using cooling water in place of chilled water in sub coolers		Sector: Chemical			
Year			Technology			
At colors division, earlier chilled water was circulated for sub coolers of Nitrobenzene and ONT distillation. System was modified and chilled water was replaced with cooling water thus reducing load on chiller. This has resulted in saving of 137645 TR- hr/year.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 0.2 Lakhs			Year of implementation: 2007			
First year energy cost savings, Rs.: 5.5 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	157308					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Reduction in utilities/power consumption in spray dryer by increasing air temp at Colors Division		Sector: Chemical			
Year	Technology					
<p>At colors division, Spray Dryers are used for drying of powder. Spray dryer capacity is dependent upon airflow rate and air inlet-outlet temp. difference. It was observed that inlet air temp. is controlled by ability of the product to withstand the temp. without thermal degradation. So drying temp. of different products being dried in dryer was studied and drying temperature was increased for 5 products. As drying temp. increases, capacity of dryer increases where as fuel consumption and power per kg of dry material decreases. This ultimately results in</p> <p>(i)Reduction in time cycle (ii)Reduction in Power (iii)Reduction in Fuel consumption</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: Nil			Year of implementation: 2007			
First year energy cost savings, Rs.: 5.96 Lakhs						
First year other savings, Rs.:						
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	8582				18KL (Kerosene)	
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.5				31000	
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai						
				Signature		
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Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure		Sector: Chemical			
Year	Reduce power consumption by optimizing water in vacuum pumps		Technology			
<p>At colors division, raw water is used in vacuum pumps. Flow measured and found 30 LPM, which we had reduced to 15 LPM by changing pipe size. Reducing flow has resulted in reduced power consumption of 2 KW/pump. This modification carried out for 10 operating vacuum pumps. This resulted in total saving of Rs.5.54 Lakhs per year</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: Nil			Year of implementation: 2007			
First year energy cost savings, Rs.: 5.54 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	158400					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination		
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				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Reduce power consumption by installing energy efficient elec.fittings in different offices.		Sector: Chemical			
Year			Technology			
At PP site, Total 86 Nos of 2 X 40 watt conventional tube lights were replaced by energy efficient 2 X 36 watt Polylux tube having 30% higher lumens output and 3 times higher life. Due to higher lumen output, we could reduce 20% tube rods without reducing the light level.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 0.16 Lakhs			Year of implementation: 2007			
First year energy cost savings, Rs.: 0.42 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	12000					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Power saving by replacing inefficient pumps to Energy Efficient pumps	Sector: Chemical			
Year		Technology			
Very old pumps of DM water transfer (02 Nos.) having total power consumption of 5.8 KW were replaced with new energy efficient pumps (02 Nos.) having total power consumption of 1.9 KW resulting in power saving of 3.9 KW					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 1.54 Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 2.24 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	40727				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	5.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. K M Desai				Signature	
				Date	


Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Power saving by replacing very old in efficient pumps with energy efficient pumps for chilled water at PP site Polymer plant.	Sector: Chemical			
Year		Technology			
At our polymer plant utility, very old (40 years old) chilled water primary pumps (3 nos operating +1 no standby) replaced with new energy efficient pumps resulting in total power saving of 3.4 KW					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 2.75 Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 4.71 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	85636				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	5.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. K M Desai				Signature	
				Date	



Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Flash steam recovery from steam condensate	Sector: Chemical			
Year		Technology			
<p>At Polymer plant, earlier no system of flash steam/condensate recovery available.</p> <p>New flash steam recovery system installed for condensate generated from</p> <p>(i) 13 bar pressure steam --159 kg/hr steam generated at 2.5 bar pressure</p> <p>(ii) 7 bar pressure steam --26 kg/hr steam generated at 2.5 bar pressure.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 9.25 Lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 8.07 Lakhs					
First year other savings, Rs.:					
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption		430			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		2100			
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. K M Desai				Signature Date	

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Installing Ventury type cooling towers for energy conservation.		Sector: Chemical			
Year			Technology			
<p>For polymer plant, we have installed new ventury type cooling towers (03 Nos.) for new requirement instead of conventional induced draft cooling tower. Ventury type cooling tower does not require fan for inducing air for cooling the water, but instead specially designed ventury nozzles introduce air in the cooling tower by water jet only.</p> <p>This has resulted in saving of motor power for 3 fans. (15 HP motor)</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: Nil			Year of implementation: 2007			
First year energy cost savings, Rs.: 4.65 Lakhs						
First year other savings, Rs.:						
On annual basis	kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	1.33					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination		
Contact person who could be contacted for more information:Mr.K M Desai				Signature		
				Date		

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Energy saving by revamping of insulation of chilled water line		Sector: Chemical		
Year			Technology		
<p>Pharma plant chilled water insulation was 20 years old and it was observed that it was not performing satisfactorily and due to high losses we were not able to get required temperature at plant. Old insulation completely removed and replaced with new insulation. After replacement we are able to get required temperature at plant. Total saving of 24 TR/hr. was achieved.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 5			Year of implementation: 2007		
First year energy cost savings, Rs.: 9.82 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	196428				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr.K M Desai				Signature	
				Date	

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Replacement of old pump with Energy Efficient pump		Sector: Chemical		
Year			Technology		
At FDH plant cooling tower, old inefficient pump was replaced with new Energy Efficient pump. Total power saved 3 KW					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 0.75			Year of implementation: 2007		
First year energy cost savings, Rs.: 0.83 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	23760				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. K M Desai				Signature	
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ID	Title of the measure Replacement of old inefficient reciprocating chiller with new screw type chiller at pharma and pilot plant		Sector: Chemical		
Year			Technology		
<p>Old Reciprocating chiller (10 TR capacity) was replaced with screw chiller used for pharma and pilot plant. Screw chiller have very low specific power consumption. This has resulted in</p> <p>(1)Power saving of Rs.3.88 lakhs per year (2)Reduced maint.cost (3)Increased reliability due to good automated control possible.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 8 lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 3.88 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	111000				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information:Mr.K M Desai				Signature	
				Date	

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(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Pressure based control for steam supply to ejectors for DCP distillation	Sector: Chemical			
Year		Technology			
Highly efficient pressure controlling loop to adjust/monitor the operation of control valve based on existing electronic pressure transducers of steam from DCS at DCP distillation unit. This has resulted in reduced steam consumption due to no fluctuation in pressure. Reduction in steam consumption of 79 MT/year					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 0.57 lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 0.5 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption		23.7			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		2150			
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr.K M Desai				Signature	
				Date	

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(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Under pressure distillation instead of atm. Distillation		Sector: Chemical		
Year			Technology		
Utility consumption(Steam/Power) reduced by arrangement of carrying out under pressure distillation in place of atm. Distillation for Nitro Benzene/ODBC/ONT/MCB etc. recovery at shed N colors west site. This has resulted in saving of : Steam :2400 Mt/Year Power: :58276 KWH/year					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 1.5 lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 17.98 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	58276	720			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5	2200			
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information:Mr.K M Desai				Signature	
				Date	



Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Elimination of toluene addition at Epoxy plant and reduce Energy cost for it's recovery.		Sector: Chemical			
Year			Technology			
<p>In one of the product (XR-80) at Epoxy plant, toluene was used for improving viscosity of mass and improve agitation. This toluene was then recovered in subsequent stages and distilled to get back pure toluene, which can be reused. During recovery around 10% getting lost and make up was required.</p> <p>Toluene addition was eliminated which resulted in utility savings of:</p> <p>(1) Reduced cooling/chilling load (2) Elimination of power consumption of vacuum pumps</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: Nil lakhs			Year of implementation: 2007			
First year energy cost savings, Rs.: 9 Lakhs						
First year other savings, Rs.:						
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	1.8					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr.K M Desai						
				Signature		
				Date		


Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Reduction in refrigeration load of chilled brine and chilled oil lines insulation replacing high efficient nitril rubber insulation at PHIN plant.		Sector: Chemical			
Year			Technology			
At PHIN plant, chilled brine(-40 DegC) and Chilled oil(-25 Deg.C) lines insulation was replaced with new high efficient nitril rubber insulation. This has resulted in reduced loss of TR and saving of power of 2,75,000 KWH/year						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): Self						
Total investment, Rs.: 10 lakhs			Year of implementation: 2007			
First year energy cost savings, Rs.: 15.1 Lakhs						
First year other savings, Rs.:						
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Reduction in Energy consumption	2,75,000					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	5.5					
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination		
Contact person who could be contacted for more information: Mr.K M Desai						
				Signature		
				Date		


Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Replacement of conventional chilling system with high efficient screw chiller (York make) for chilled water system at PP site	Sector: Chemical			
Year		Technology			
<p>At PP site, polymer unit utility, conventional chilling plant replaced with new advance high efficient York make screw chiller. Specific power consumption has been reduced by 0.25 KWH/TR This has resulted in saving of Rs.18.48 Lakhs</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 35 lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 18.48 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption	528000				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.5				
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr.K M Desai					
				Signature	
				Date	

Energy Conservation Measure implemented in 2007-2008

(To be filled up separately for each Energy Conservation Measure)

ID	Title of the measure Bac comber system for cooling water treatment	Sector: Chemical			
Year		Technology			
<p>At PP Site, cooling water treatment for VAHP chilling unit was replaced by non chemical based Bac comber technology which utilizes ultra low frequency and ionization (cathode and anode) principle and thus to result in following advantages.</p> <p>(1) Reduced steam consumption in VAHP because of reduced fouling of tubes. (2) Better and consistent heat transfer efficiency thru' supply of desired quality of water. (3) No need for frequent monitoring. (4) Cleaning frequency of HE is reduced, leads to better availability of the plant.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Self					
Total investment, Rs.: 7.5 lakhs			Year of implementation: 2007		
First year energy cost savings, Rs.: 2.3 Lakhs					
First year other savings, Rs.:					
On annual basis	KWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Reduction in Energy consumption		98.5			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		2335			
Company complete address: Atul Limited, Valsad-Gujarat				We authorize Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr. K M Desai:				Signature	
				Date	