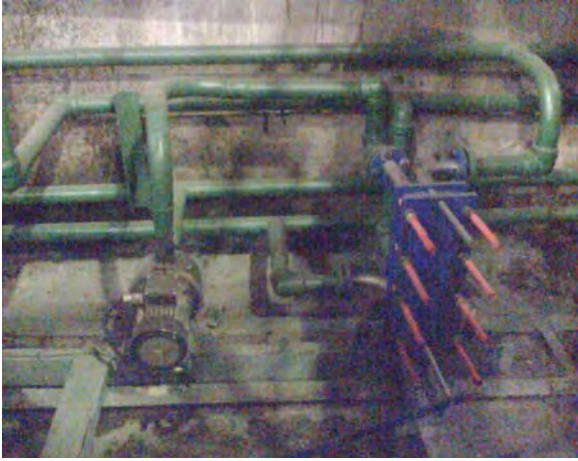



Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Pre heating of standby 46 engine through hot water heat recovery of running 46 engine resulting in power saving.	Technology -- Waste Heat Recovery			
Description of the energy conservation measure:					
The jacket waste heat is utilized to heat boiler feed water up to 90 Deg C before sending it to boilers. Still surplus waste jacket heat was available. Using this waste heat has resulted in stoppage of electrical heater.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 12.92 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	3.04				
Energy consumption after	0				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address:				We authorise Bureau to use this information for dissemination	
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305				Signature	
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Date 22.10.2007	


Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Use of partially heating media steam in place of power in HFO separator at 3x13.5 mw DG power plant	Technology—Switch of Heating medium			
Description of the energy conservation measure:					
Steam produced from waste heat recovery boiler is utilized in HFO separator at 3x13.5 mw DG power plant instead of electrical heating. Using this waste heat has resulted in stoppage of electrical heater.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 14.24 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	3.35				
Energy consumption after	0				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address:				We authorise Bureau to use this information for dissemination	
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305					
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Signature	
				Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Stoppage of 1x4.0 mw running DG by incorporating additional load shedding & transfer of load to 13.5 mw DG power plant resulting in fuel saving.	Technology—Operational Philosophy			
Description of the energy conservation measure:					
<p>Running both power plants in isolation was resulting in reduced loading on each running DG sets, i.e. reduced efficiency & increased fuel consumption. However risk of unbalance power from 4MW set power plant to 13.54 MW set power plant was absent. With calculated risk & auto load shedding, both power plants were synchronized. Thus, running of 1x4.0 MW DG sets & 2x13.54 MW DG sets in parallel was sufficient. This reduced overall 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): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 99.10 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before				54750	
Energy consumption after				54089.35	
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...				15000	
Company complete address:				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	
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Contact person who could be contacted for more information:					
Mr N K Agarwal (AVP–Utility / Energy / SHE)					

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Installation of variable speed drive for cooling tower fan in utility & process ct fan.	Technology –VFDives			
Description of the energy conservation measure: Installed variable speed drive for cooling tower fan in utility & process CT fans. Due to this modification, power saving of 1.23 lakhs kwh per annum has been achieved.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: 6.0 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 5.22 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	2.23				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007


ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Installation of variable speed AC drives for take up supply air fan U-19,U-18 a/b , U-09 & U-11	Technology –VF Drives			
Description of the energy conservation measure:					
Installed variable speed AC drives for take up supply air fan U-19,U-18 a/b , U-09 & U-11. Due to this modification, power saving of 1.87 lakhs kwh per annum has been achieved.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: 6.0 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 7.93 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	2.87				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

ID to be filled by BEE	Title of the measure Reduction in lighting consumption		Sector : Petrochemicals		
Year to be filled by BEE			Technology –Energy Eff lights		
Description of the energy conservation measure: Replaced various tube lights with cost effective CFL lights. This has resulted in to power saving of 2.67 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 11.35 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	4.67				
Energy consumption after	2.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals			
	Installation of inverters for PSF HVAC					
Year to be filled by BEE			Technology –VF drives			
Description of the energy conservation measure:						
Installed invertors for PSF HVAC machines and achieved the power saving of 2.5 lakhs kwh per annum.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): In-house						
Total investment, Rs.: 5.0 lakhs			Year of implementation: 2006-07			
First year energy cost savings, Rs.: 10.62 lakhs						
First year other savings, Rs.: Nil						
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Energy consumption before	4.50					
Energy consumption after	2.00					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25					
Company complete address:				We authorise Bureau to use this information for dissemination		
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305						
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Signature		
				Date 22.10.2007		


Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Automation of cooling tower fan logic in DCS to conserve electrical energy resulting in power saving	Technology –Auto operation			
Description of the energy conservation measure:					
Automated the cooling tower fan logic in DCS. This resulted in power saving of 3.07 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 13.03 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	6.07				
Energy consumption after	3.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address:				We authorise Bureau to use this information for dissemination	
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305				Signature	
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Date 22.10.2007	

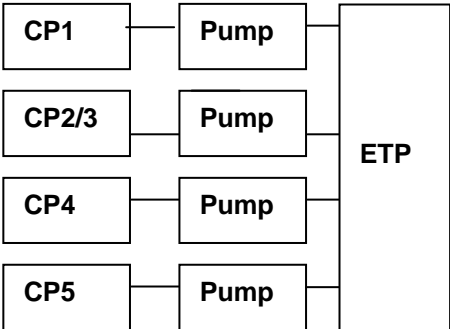
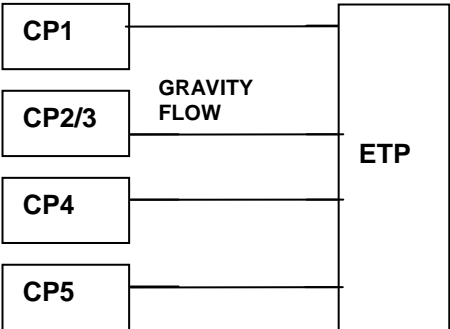
Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	New pumps installation in utility resulting in power saving	Technology –Energy Eff pumps			
Description of the energy conservation measure :					
Replaced the inefficient cooling water pumps in utility block by efficient pumps and achieved the power saving of 10.7 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: 30.00 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 32.33 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	20.7				
Energy consumption after	10.0				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.00				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Installation of hydro boosting system in soft water system	Technology --Energy eff/VF driven pumps			
<p>Description of the energy conservation measure:</p> <p>To cater the existing & expansion soft water demand, new energy efficient hydro boosting system installed. This has resulted in to power saving of 1.07 lakhs kwh per annum.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Grundfoss, Chennai					
Total investment, Rs.: 4.00 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 4.30 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	2.07				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.00				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	


Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals				
Year to be filled by BEE	Gravity flow of effluent from CP-1/2/3 resulting in power saving	Technology –Stoppage of pumping(Gravity flow)				
<p>Description of the energy conservation measure:</p> <p>Initially effluent from CP-1/2/3 used to get pumped to ETP. Now gravity is used to divert the effluent from CP-1/2/3 to ETP. This has resulted in to power saving of 0.43 lakhs kwh per annum.</p>						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): In-house						
Total investment, Rs.: 4.00 lakhs			Year of implementation: 2006-07			
First year energy cost savings, Rs.: 1.83 lakhs						
First year other savings, Rs.: Nil						
On annual basis		Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before		0.43				
Energy consumption after		0				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		4.25				
<p>Company complete address:</p> <p>Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305</p> <p>Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)</p>					<p>We authorise Bureau to use this information for dissemination</p> <p>Signature</p> <p>Date 22.10.2007</p>	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Modification in PSF-1 AHU to reduce air velocity resulting in power saving	Technology – Reduction of flow resistance			
Description of the energy conservation measure:					
Cross sectional area increased. This increased retention time for air & consequently resulted in to power saving of 0.83 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 3.51 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	1.83				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address:				We authorise Bureau to use this information for dissemination	
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Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Signature	
				Date 22.10.2007	


Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure Solar water heater for canteen	Sector : Petrochemicals			
Year to be filled by BEE		Technology –Renewable Energy			
Description of the energy conservation measure: To cater the hot water requirement of canteen, solar hot water system is used. Hot water is used for utensils cleaning, potato, rice & tea boiling. This resulted in saving in LPG cylinders.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): Shreyans Energy Ltd, Jabalpur					
Total investment, Rs.: 1.90			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 1.29 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before			0.006		
Energy consumption after			0.003		
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...			430		
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	Replacement of quench air cooling coils to save power	Technology – Reduction of flow resistance/Improved heat transfer			
Description of the energy conservation measure:					
Replaced choked cooling coils by new ones. This has resulted in to power saving of 1.88 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): Coil Company, Delhi					
Total investment, Rs.: 8.0			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 7.99 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	2.88				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Signature	
				Date 22.10.2007	


Energy Conservation Measure implemented in 2006-2007


ID to be filled by BEE	Title of the measure Reduction of power consumption by running centac in place of recip compressors (8bar) resulting in power saving of 120 kwh	Sector : Petrochemicals			
Year to be filled by BEE		Technology—Energy Eff compression system			
Description of the energy conservation measure: Avoided inefficient operation of recip compressors by installing single high capacity centac. This has resulted in to power saving of 8.04 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 34.16 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	18.04				
Energy consumption after	10.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

ID to be filled by BEE	Title of the measure Replacement of old drift eliminator with new C type PVC drift eliminator in CPI & CPII/III A&B cells resulting in power saving of 12.3 kwh.		Sector : Petrochemicals		
Year to be filled by BEE			Technology –Energy eff system in cooling towers		
Description of the energy conservation measure: Old herringbone type drift eliminators were replaced with C type PVC drift eliminator. This type of PVC drift eliminator are having smooth surface and C type profile which in turn reduces energy consumption.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): M Square Engineers, Pune.					
Total investment, Rs.: 3.5 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 2.30 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	1.54				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals		
Year to be filled by BEE	Removal of heat recovery coil from quench system resulting in power saving.		Technology –Reduction of flow resistance		
Description of the energy conservation measure:					
Removal of choked cooling coils by new ones. This has resulted in to power saving of 0.27 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 1.15 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	1.27				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals		
Year to be filled by BEE	Power saving in HVAC spary pumps by optimising operations resulting in power saving.		Technology –Energy Eff pumping system		
Description of the energy conservation measure:					
Trials conducted on spray pumps, based on these trials high head pumps were replaced with low head pumps.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In House					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 26.56 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	16.25				
Energy consumption after	10.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals		
Year to be filled by BEE	Replacement of RW pumps by energy efficient pump for CPP supply		Technology –Energy Eff pumping system		
Description of the energy conservation measure:					
Due to low head requirement to CPP, existing high head pump replaced by low head & energy efficient pump. This has resulted in to power saving of 0.30 lakhs kwh per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
					
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 1.28 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	1.30				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals			
Year to be filled by BEE	Stopping of cooling water flow through idle compressors		Technology—Operational philosophy			
Description of the energy conservation measure:						
Earlier we have a practice to open the cooling water supply to all stand by machine. Now we have closed c/w valves. C/w flow required was less. This has resulted in to power saving of 1.52 lakhs kwh per annum.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
						
Agency that executed the project (with complete address and email): In-house						
Total investment, Rs.: Nil			Year of implementation: 2006-07			
First year energy cost savings, Rs.: 6.48 lakhs						
First year other savings, Rs.: Nil						
On annual basis		Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before		2.52				
Energy consumption after		1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		4.25				
Company complete address:					We authorise Bureau to use this information for dissemination	
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305					Signature	
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)					Date 22.10.2007	

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals		
Year to be filled by BEE	Conversion of dow heated air heater to steam heated air heater resulting in FO saving		Technology –Switch of heating medium		
Description of the energy conservation measure:					
Initially heat of DOW vapours is used to pre heat HTM furnace air. Now steam is being used. This has resulted in to FO savings of 448.95 KL per annum.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 67.34 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before				1448.95	
Energy consumption after				1000.00	
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...				15000	
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals			
Year to be filled by BEE	Running of CP-1 liquid dow cooler on inverter resulting in FO saving		Technology –VF drive			
Description of the energy conservation measure:						
Inverter is installed on CP-1 liquid dow cooler. This has resulted in to FO savings of 94.61 KL per annum.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email): In-house						
Total investment, Rs.: Nil			Year of implementation: 2006-07			
First year energy cost savings, Rs.: 14.19 lakhs						
First year other savings, Rs.: Nil						
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Energy consumption before				194.61		
Energy consumption after				100.00		
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...				15000		
Company complete address:				We authorise Bureau to use this information for dissemination		
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305						
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Signature		
				Date 22.10.2007		

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	To reduce power consumption by reducing PGP discharge pressure by 20 kg/cm ² in each CP	Technology –Operational philosophy			
Description of the energy conservation measure:					
Trials conducted at various discharge pressure's. Based on these trials PGP discharge pressure was reduced w/o affecting polymer quality.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 8.27 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	2.95				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
Company complete address:				We authorise Bureau to use this information for dissemination	
Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305					
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				Signature	
				Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure STOPPAGE OF OFF-LINED SLURRY FEED PUMP IN CP-1/2/3 FOR POWER SAVING	Sector : Petrochemicals
Year to be filled by BEE		Technology –Operational philosophy
<p>Description of the energy conservation measure:</p> <p>During trials it was observed that off line slurry feed pump is not required, hence pump was stopped resulting in power saving.</p>		
Picture/ sketch/ drawing before modification (if available)	Picture/ sketch/ drawing after modification	
Agency that executed the project (with complete address and email): In-house		
Total investment, Rs.: Nil		Year of implementation: 2006-07
First year energy cost savings, Rs.: 3.08 lakhs		
First year other savings, Rs.: Nil		
On annual basis	Lakhs kWh	Coal (Tons)
Gas Nm ³	Oil (kL)	Other
Energy consumption before	0.72	
Energy consumption after	0	
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25	
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)		We authorise Bureau to use this information for dissemination Signature Date 22.10.2007

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals		
Year to be filled by BEE	POWER SAVING BY IMPLEMENTATION OF CONTROLLER SYSTEM FOR NITROGEN COMPRESSOR AND RE-ROUTING OF PTA LINE		Technology—Automation of control system		
<p>Description of the energy conservation measure:</p> <p>PTA is the raw material of our CP plant which is being transported to respective CP's through compressed nitrogen. Power saving was achieved by implementation of controller system for nitrogen compressor and re-routing of PTA line</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email): In-house					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 3.9 lakhs					
First year other savings, Rs.: 3.0 lacs					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	1.92				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.25				
<p>Company complete address:</p> <p>Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305</p> <p>Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)</p>				<p>We authorise Bureau to use this information for dissemination</p> <p>Signature</p> <p>Date 22.10.2007</p>	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure		Sector : Petrochemicals		
Year to be filled by BEE	REDUCTION IN STEAM CONSUMPTION FROM 0.98 MT/MT TO 0.80 MT/MT		Technology –Reduction of steam wastage		
Description of the energy conservation measure: Through proper steam trap management, steam was achieved in PSF plant.					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: Nil			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 138 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before		16571			
Energy consumption after		10000			
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...		2100			
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure SELECTION OF COUNTER FLOW COOLING TOWER INSTEAD OF CROSS FLOW	Sector : Petrochemicals			
Year to be filled by BEE		Technology—Energy Eff cooling tower			
Description of the energy conservation measure:					
<p>We have 2 no cross flow cooling towers for CP1 & CP2/3 Utility/Process plants since 1994 For the new CP4 & CP5 plant, we have installed / commissioned 1 no Counter flow cooling tower instead of cross flow type The pumping head of the cross flow cooling tower is 9.25m. For same water flow rate & duty conditions, the pumping head for the counter flow cooling tower with PVC film flow is 6.70m. The pumping head reduction of 2.55m in counter flow type as compared to cross flow type results in saving of 56 kwh.</p>					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 16 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 16.36 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	5.91				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	3.33				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure	Sector : Petrochemicals			
Year to be filled by BEE	SHIFTING OF PROCESS TOWER TO BUILDING ROOF INSTEAD OF GROUND FLOOR	Technology –Energy Eff design system			
Description of the energy conservation measure: <ul style="list-style-type: none"> Process cooling water along with Utility cooling water requirement for CP-1/2/3 plants is met through common cross flow type tower at ground floor. CP1 & CP2/3 plants are located at certain distance away from cooling tower For the new CP4 & CP5 plants, we have installed / commissioned separate process cooling tower (Counter flow type) at 33 mtr elevation (plant building roof top). Cooling water pumps are located at base of the plant building i.e. ground floor. With new cooling tower located at plant building terrace, we derive the advantage of plant height adding into free available inlet head to cooling water pumps. In turn, it reduces developed head of pump by 33m (keeping same discharge heads of pumps in both cases). Also, due to new tower location near the plant, piping friction losses are reduced. 					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email):					
Total investment, Rs.: 14.67 lakhs			Year of implementation: 2006-07		
First year energy cost savings, Rs.: 34.95 lakhs					
First year other savings, Rs.: Nil					
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other
Energy consumption before	9.74				
Energy consumption after	1.00				
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.00				
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305 Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007	

Energy Conservation Measure implemented in 2006-2007

ID to be filled by BEE	Title of the measure REDUCTION IN IM AIR PRESSURE FROM 6 TO 4.5 BAR		Sector : Petrochemicals			
Year to be filled by BEE			Technology –Operational philosophy			
Description of the energy conservation measure:						
For intermingling of DTY yarn, 6 Bar air was being used. This pressure requirement is lowered to 4.5 Bar without affecting yarn quality.						
We have procured new centac compressors for 4.5 Bar IM air & commissioned them.						
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification			
Agency that executed the project (with complete address and email):						
Total investment, Rs.: 180 lakhs			Year of implementation: 2006-07			
First year energy cost savings, Rs.: 91.01 lakhs						
First year other savings, Rs.: Nil						
On annual basis	Lakhs kWh	Coal (Tons)	Gas Nm ³	Oil (kL)	Other	
Energy consumption before	23.75					
Energy consumption after	1.00					
Energy tariff, Rs/ kWh/ Ton/ Nm ³ / kL ...	4.00					
Company complete address: Indo Rama Synthetics (India) Ltd. A-31 , MIDC Industrial Area, Butibori , Nagpur (M.S.) - 441122 Tel : 91-7104-265314 Fax: 91-7104-265305				We authorise Bureau to use this information for dissemination Signature Date 22.10.2007		
Contact person who could be contacted for more information: Mr N K Agarwal (AVP–Utility / Energy / SHE)						